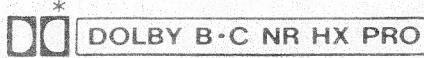


Service Manual

Dolby NR-Equipped
Stereo Cassette Deck

Cassette Deck

RS-B465



* HX Pro headroom extension originated by Bang Olufsen and manufactured under license from Dolby Laboratories Licensing Corporation.
"DOLBY", the double-D symbol, and "HX PRO" are trademarks of Dolby Laboratories Licensing Corporation.

RS-B755 MECHANISM SERIES (AR350)

■ SPECIFICATIONS

■ CASSETTE DECK SECTION

Deck system	Stereo cassette deck
Track system	4-track, 2-channel
Heads	
Rec/Play	Permalloy Head
Erasure	Double-gap ferrite Head
Motors	
Capstan drive	DC servo motor
Reel table drive	DC motor
Recording system	AC bias
Bias frequency	80 kHz
Erasing system	AC erase
Tape speed	4.8 cm/sec. (17/8 ips)
Frequency response	
NORMAL	30 Hz~15 kHz (±3 dB)
	30 Hz~15 kHz (DIN)
CrO ₂	30 Hz~16 kHz (±3 dB)
	30 Hz~16 kHz (DIN)
METAL	30 Hz~17 kHz (±3 dB)
	30 Hz~17 kHz (DIN)
S/N (signal level= max recording level, CrO ₂ type tape)	
Dolby C NR on	74 dB (CCIR)
Dolby B NR on	66 dB (CCIR)
Dolby NR off	56 dB (A weighted)

AREA PROJECTION

Color

(K)... Black Type

Area

Country Code	Area	Color
(E)	Continental Europe.	(K)
(EB)	Great Britain.	
(EG)	F.R. Germany and Italy.	

CONTINENTAL EUROPE
GREAT BRITAIN
F.R. GERMANY AND ITALY

RECORDED AND REPRODUCED BY TELEVISION

Wow and flutter	0.07% (WRMS) ±0.2% (DIN)
Fast forward and rewind times	Approx. 90 seconds with C-60 cassette tape
Input sensitivity and impedance	
MIC	0.25 mV/600Ω~10 kΩ
LINE IN	60 mV/47 kΩ
Output voltage and impedance	
LINE OUT	400 mV/800Ω
HEADPHONES	30 mV/8Ω (8Ω~600Ω)

■ GENERAL

Power consumption	16 W
Power supply	
For Continental Europe, F.R. Germany and Italy	AC 50/60 Hz, 220 V
For Great Britain	AC 50/60 Hz, 240 V
Dimensions (W×H×D)	430×125×290mm (16 ^{15/16} "×4 ^{15/16} "×11 ^{3/32} ")
Weight	4.3 kg (9.5 lb.)

Note:

Specifications are subject to change without notice.
Weight and dimensions are approximate.

Technics

Matsushita Electric Industrial Co., Ltd.
Central P.O. Box 288, Osaka 530-91, Japan

■ CONTENTS

	Page
ACCESSORIES	2
CONNECTIONS	2
FRONT PANEL CONTROLS AND FUNCTIONS	3, 4
DISASSEMBLY INSTRUCTIONS	5~8
MEASUREMENT AND ADJUSTMENT METHODS	8~10
TERMINAL FUNCTION OF IC	11
INTERNAL CONNECTION OF FL	12
BLOCK DIAGRAM	13, 14
TERMINAL GUIDE OF IC'S, TRANSISTORS AND DIODES	15

	Page
SCHEMATIC DIAGRAM	16~21
WIRING CONNECTION DIAGRAM	22
PRINTED CIRCUIT BOARDS	23~26
REPLACEMENT PARTS LIST	27~30
PACKING	30
EXPLODED VIEWS	31~34
RESISTORS & CAPACITORS	35, 36

■ ACCESSORIES

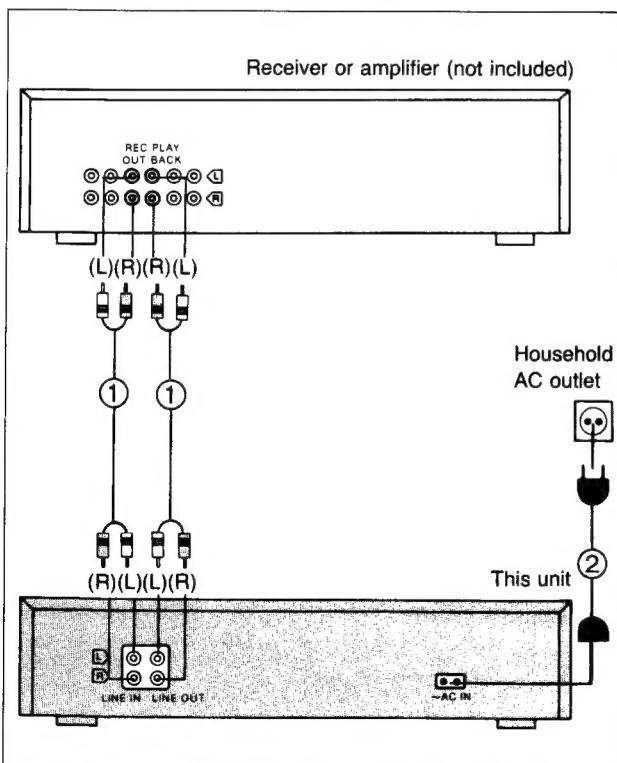
- AC power supply cord
- 1
 [(SFDAC05E03)... (E, EG)]
- 1
 [(SJA193-1) (EB)]

- Stereo connection cables
- 2
 (SJP2249-3)

■ CONNECTIONS

Make connections in the numbered sequence by using the included cables.

- ① Connect the stereo connection cables.
- ② Connect the AC power supply cord.

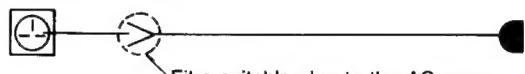


AC power supply cord (②)

The configuration of the AC outlet and AC power supply cord differs according to area.

For United Kingdom

Household AC outlet



Fit a suitable plug to the AC power supply cord.

Placement hints

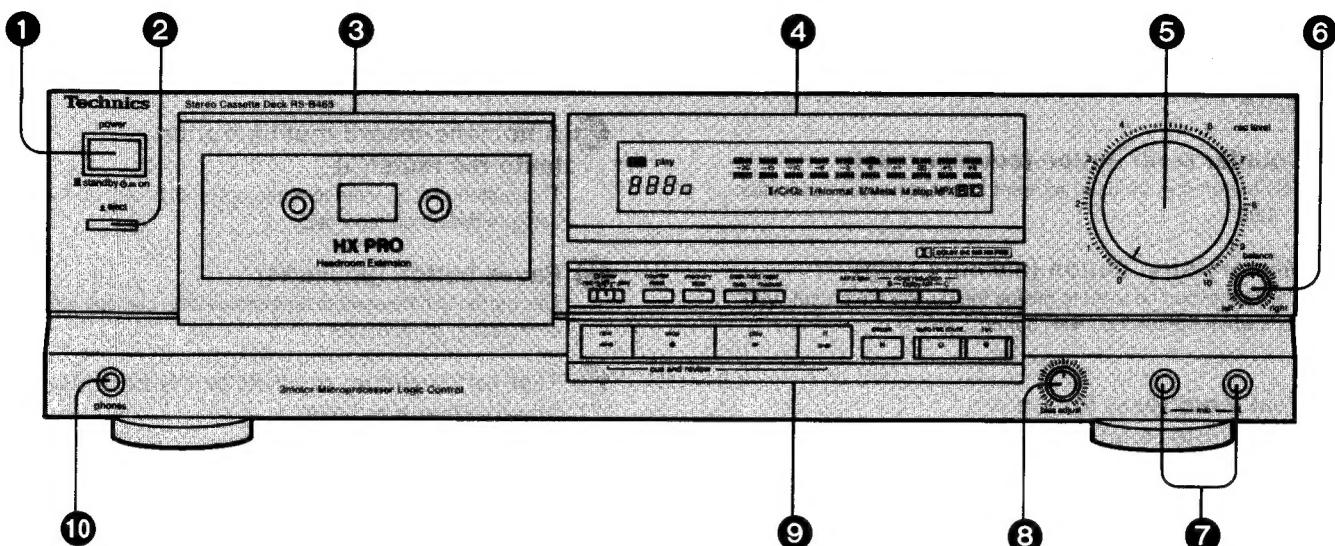
If this unit is placed near a receiver or a tuner, a "hum" noise may be heard during tape playback, recording, or AM reception of the receiver or the tuner.

If this occurs, leave as much space as possible between the units, or place them where there is the least amount of "hum".

Note:

This unit is a precision instrument. Be sure to place it on a flat surface.

■ FRONT PANEL CONTROLS AND FUNCTIONS



Control section

1 Power "standby \odot /on" switch (power/ \blacksquare standby \odot \blacksquare on)

This switch switches ON and OFF the secondary circuit power only. The unit is in the "standby" condition when this switch is set to the standby \odot position. Regardless of the switch setting, the primary circuit is always "live" as long as the power cord is connected to an electrical outlet.

2 Eject button (\triangle eject)

This button can be used to open the cassette holder.

3 Cassette holder

4 Display section

5 Recording-level control (rec level)

This control can be used to regulate the recording level.

6 Recording-balance control (balance)

This control can be used to balance the left and right sound levels during recording.

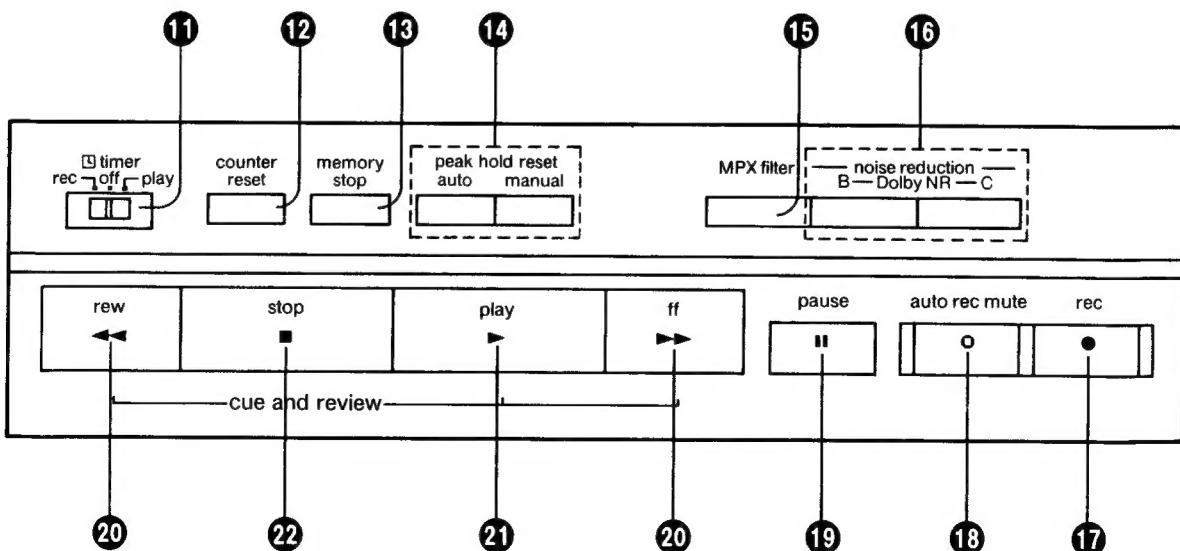
7 Microphone jacks (mic)

8 Bias-adjustment control (bias adjust)

The frequency response for each tape type can be equalised by using this control.

9 Operation section

10 Headphones jack (phones)



Operation section

11 Timer switch (□ timer)

This switch is used to automatically begin a tape recording or tape playback at a certain time, selected by a timer (not included).

12 Counter reset button (counter reset)

This button can be used to reset the tape counter indication to "000".

13 Memory-stop button (memory stop)

This button can be used to rewind the tape to the preset "000" point when the rewind (◀◀) button is pressed.

14 Peak hold reset button

(peak hold reset auto/manual)

auto: The peak level of the source is held and displayed for approximately one second at a time.

manual: The peak level of the source is held and displayed continuously.

To reset the peak hold function, press this button once again.

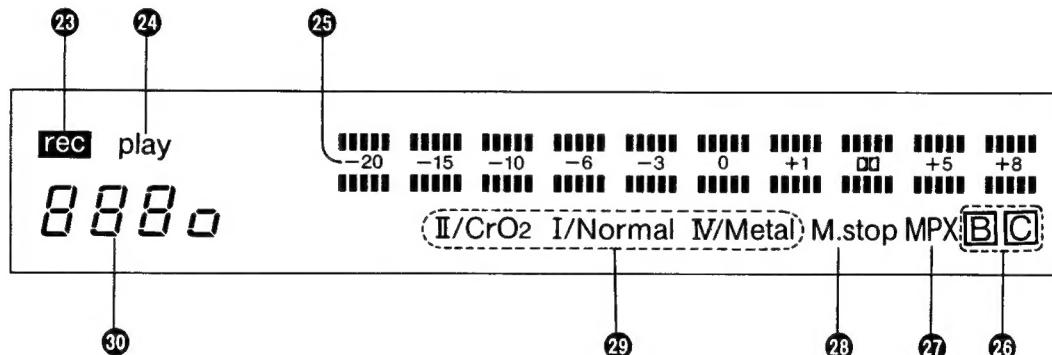
15 Multiplex filter switch (MPX filter)

This prevents the Dolby circuit from operating in error when FM stereo broadcasts are recorded using the noise reduction function.

16 Dolby noise-reduction buttons

(noise reduction)

These buttons can be used to reduce the hiss noise that is characteristic of tape. This unit is provided with both the Dolby B NR-type and C NR-type noise-reduction systems.



Display section

23 Recording indicator (rec)

This indicator illuminates to indicate that this tape deck is in the recording stand-by mode, or is recording.

24 Playback indicator (play)

When this indicator illuminates steadily, it indicates that this tape deck is in the playback mode or the recording mode. When it flashes continually, this is an indication that this tape deck is in the pause mode or the recording stand-by mode.

25 Input level meter

During playback, this meter indicates the level of the recorded sound.

During recording, it indicates the level being recorded, adjusted by the recording-level control.

26 Dolby noise-reduction indicators (B, C)

Each indicator illuminates to show the type of Dolby noise-reduction system selected by pressing one of the Dolby noise-reduction buttons.

17 Record button (rec/●)

This button can be used to change the tape deck to the recording stand-by mode.

18 Automatic-record-muting button (auto rec mute/○)

This button can be used to make a silent interval on the tape being recorded on tape deck.

19 Pause button (pause/II)

This button can be used to temporarily stop the tape playback or recording of tape deck.

20 Fast-forward/cue, rewind/review buttons (cue/review/▶▶/◀◀)

These buttons can be used to advance or rewind the tape. During playback these buttons are used to cue or review while listening to the contents at high speed.

21 Playback button (play/▶)

This button can be used to start the playback or recording of the cassette.

(The tape will then begin moving in the left-to-right direction.)

22 Stop button (stop/■)

This button can be used to stop tape movement.

27 Multiplex filter indicator (MPX)

Illuminates to indicate that the multiplex filter is set to "on".

28 Memory-stop indicator (M.stop)

This indicator illuminates to indicate that this tape deck is in the memory stop mode.

29 Tape-select indicators

The type of tape being used will be automatically detected and the indicator will illuminate.

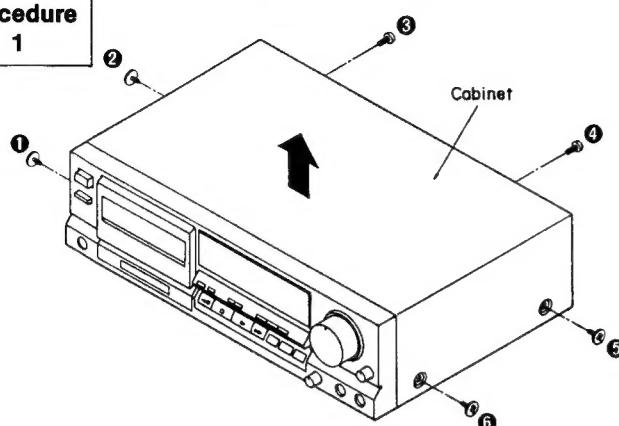
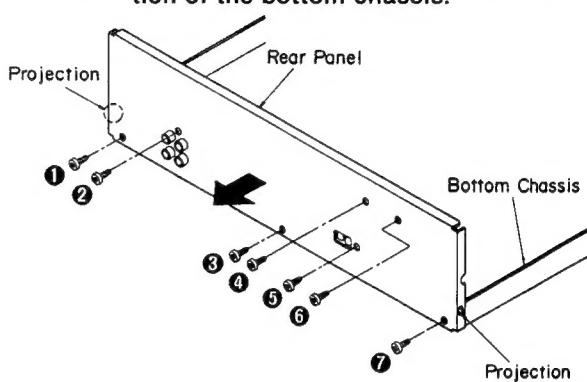
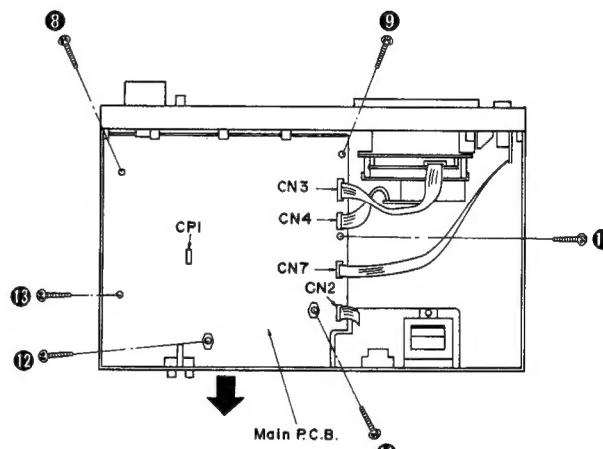
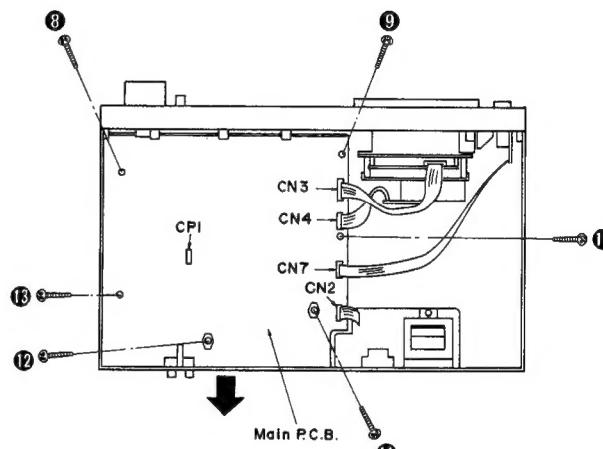
30 Tape counter

Indicates the amount of tape movement.

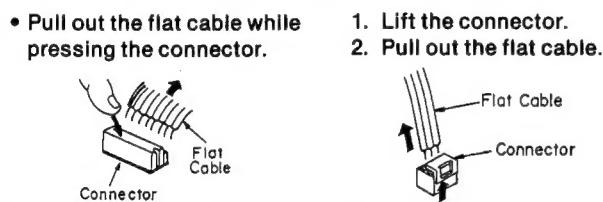
■ DISASSEMBLY INSTRUCTIONS

“ATTENTION SERVICER”

Some chassis components may have sharp edges. Be careful when disassembling and servicing.

Ref. No. 1	Removal of the cabinet	Ref. No. 2	Removal of the main P.C.B.
Procedure 1	Procedure 1→2	Procedure 1→2	Procedure 1→2
 <p>• Remove the 6 screws (1~6).</p>	 <p>1. Remove the 7 screws (1~7). 2. Remove the rear panel from the projection of the bottom chassis.</p>	 <p>3. Remove the 6 screws (8~13). 4. Remove the 1 connector (CP1). 5. Remove the 4 flat cables (CN2, CN3, CN4, CN7). 6. Remove the main P.C.B. in the direction of the arrow.</p>	 <p>1. Remove the 9 screws (1, 3, 7~13) in above figure. 2. Remove the 5 screws (14~18). 3. Remove the front panel in the direction of the arrow A.</p>

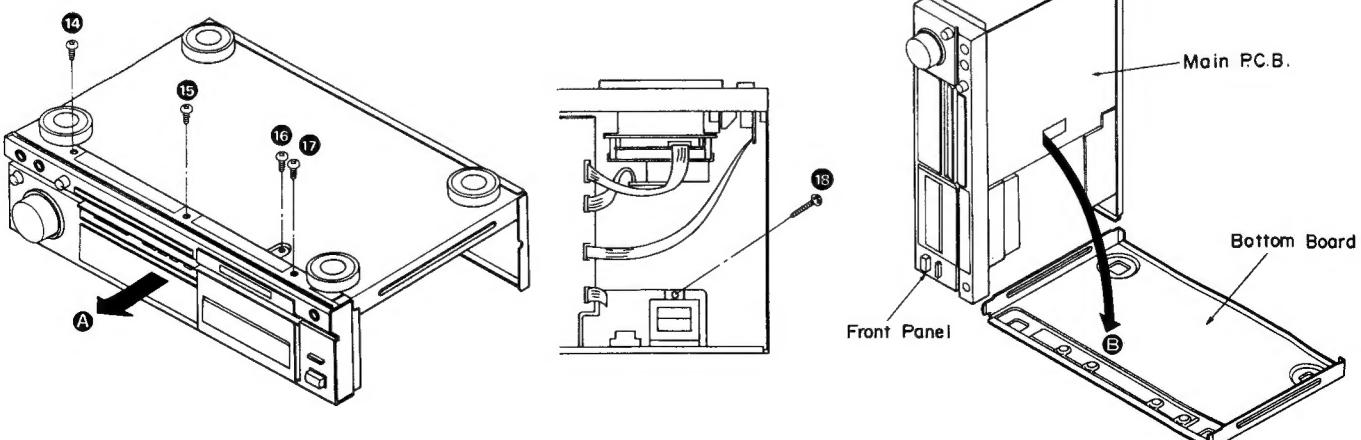
How to remove the flat cable

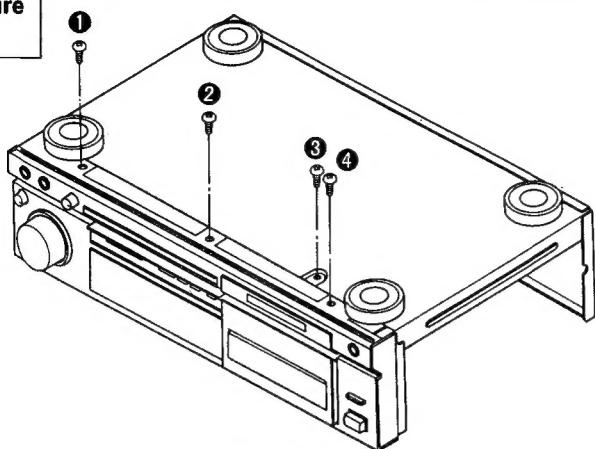
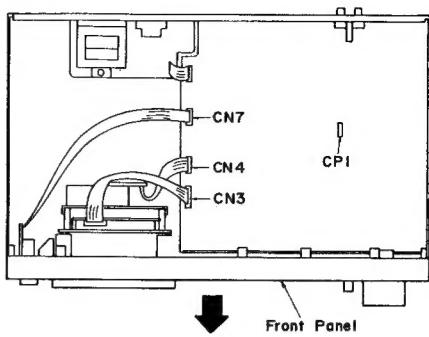
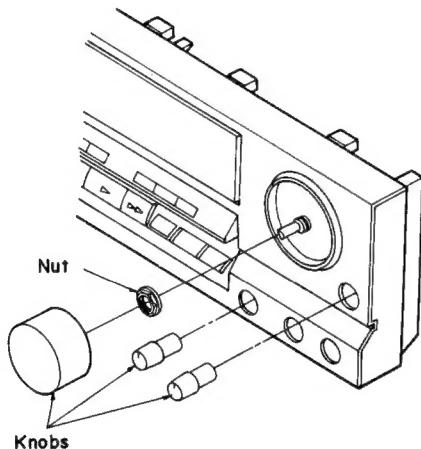
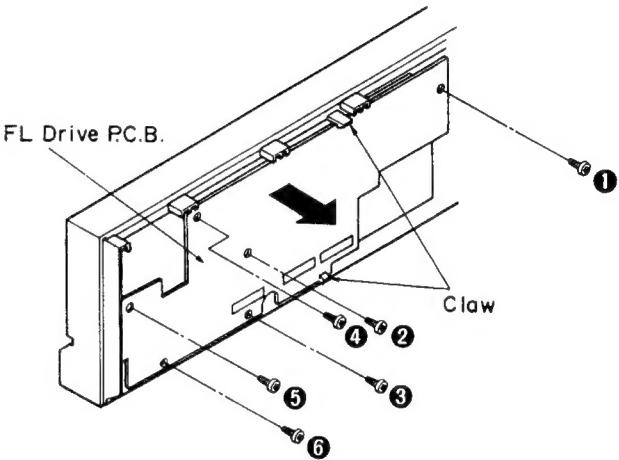
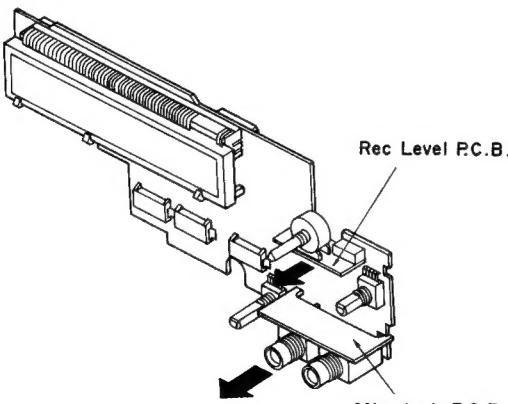
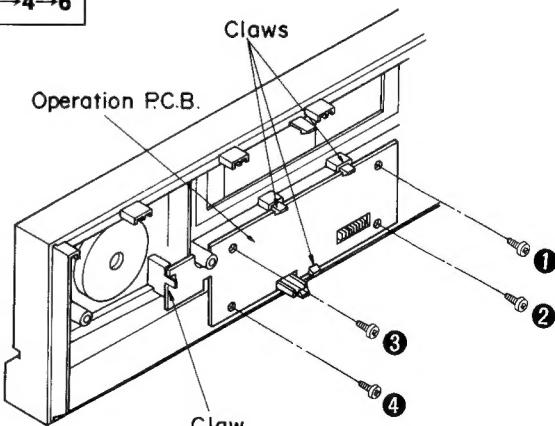


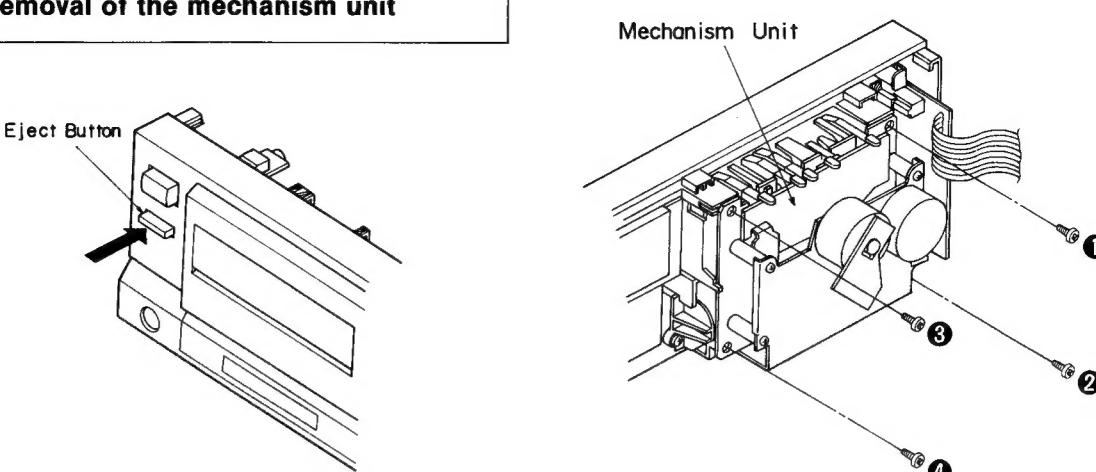
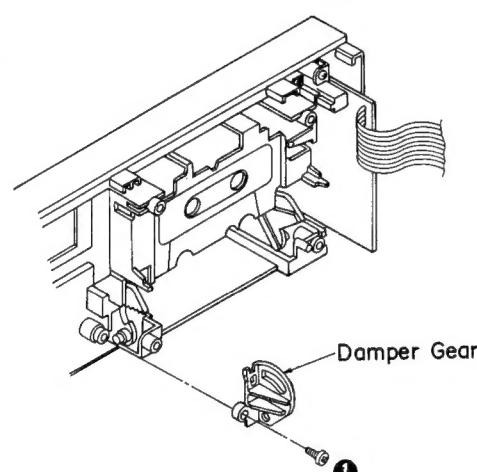
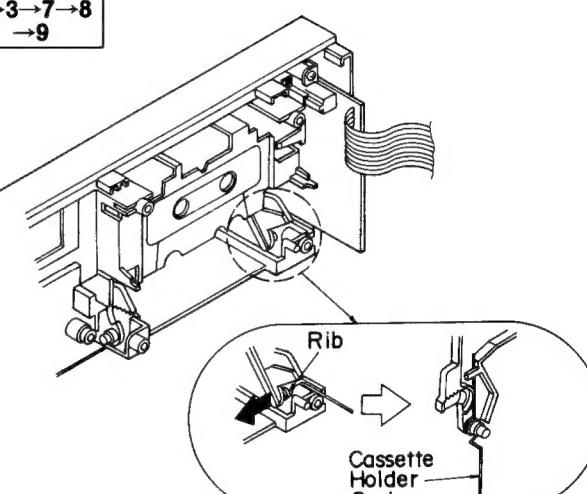
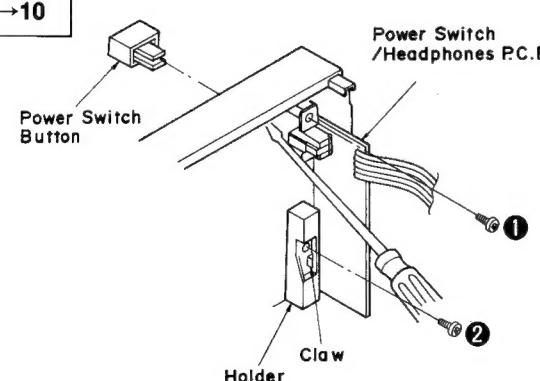
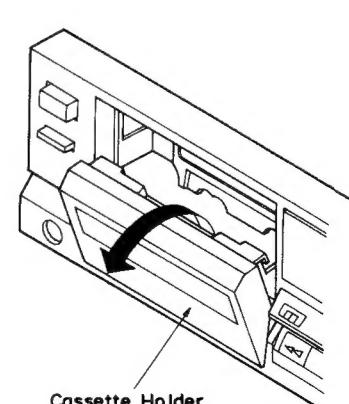
How to check the main P.C.B.

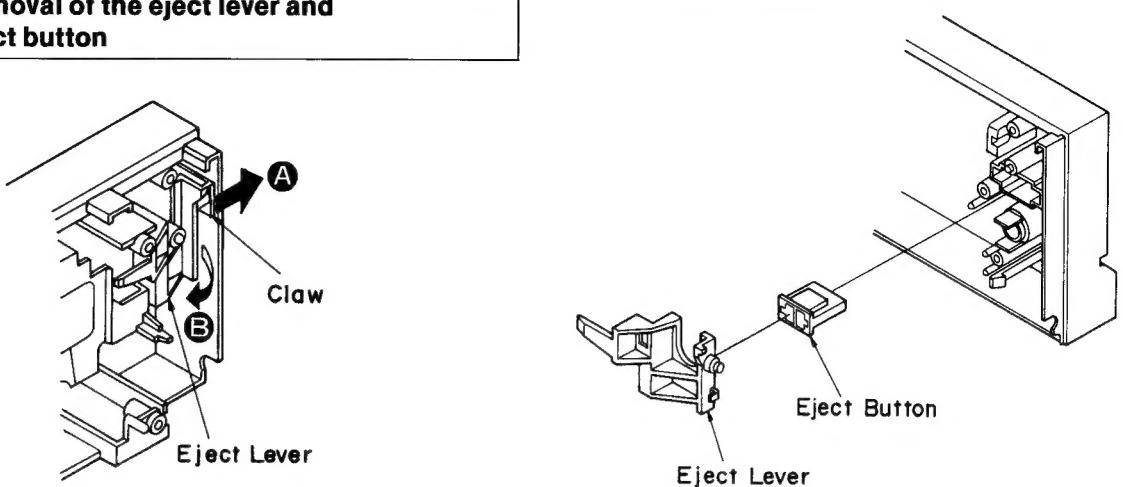
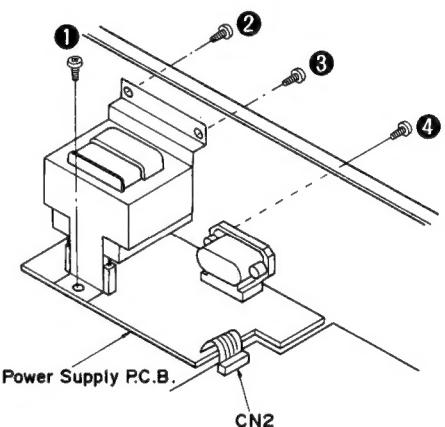
• When checking the soldered surfaces of main P.C.B. and replacing the parts, do as show.

1. Remove the 9 screws (1, 3, 7~13) in above figure.
2. Remove the 5 screws (14~18).
3. Remove the front panel in the direction of the arrow A.
4. Remove the bottom board in the direction of the arrow B.
5. Reinstall the front panel to the main P.C.B.



Ref. No. 3	Removal of the front panel		
Procedure 1→3	 <p>1. Remove the 4 screws (1~4).</p>		
		<p>2. Remove the 1 connector (CP1).</p> <p>3. Remove the 3 flat cables (CN3, CN4, CN7).</p> 	
Ref. No. 4	Removal of the FL drive P.C.B.		
Procedure 1→3→4	 <p>1. Pull out the 3 knobs.</p> <p>2. Remove the 1 nut.</p>	 <p>3. Remove the 6 screws (1~6).</p> <p>4. Release the 2 claws.</p> <p>5. Remove the FL drive P.C.B. in the direction of the arrow.</p>	
Ref. No. 5	Removal of the rec level P.C.B. and mic jack P.C.B.	Ref. No. 6	Removal of the operation P.C.B.
Procedure 1→3→4→5	 <p>■ Removal of the rec level P.C.B.</p> <ul style="list-style-type: none"> Remove the rec level P.C.B. in the direction of the arrow. <p>■ Removal of the mic jack P.C.B.</p> <ul style="list-style-type: none"> Remove the mic jack P.C.B. in the direction of the arrow. 	Procedure 1→3→4→6	 <p>1. Remove the 4 screws (1~4).</p> <p>2. Release the 4 claws.</p>

Ref. No. 7	Removal of the mechanism unit	
Procedure 1→3→7		
Ref. No. 8	Removal of the damper gear	Ref. No. 9
Procedure 1→3→7→8		Procedure 1→3→7→8 →9
	• Remove the 1 screw (1).	
Ref. No. 10	Removal of the power switch/ headphones P.C.B.	
Procedure 1→3→10		1. Remove the rib in the direction of the arrow. 2. Remove the cassette holder spring.
	1. Remove the power switch button by pushing it from behind the front panel. 2. Remove the 2 screws (1, 2). 3. Release the 1 claw. 4. Remove the holder.	
	3. Pull out the cassette holder in the direction of the arrow.	

Ref. No. 11	Removal of the eject lever and eject button
Procedure 1→3→10 →11	
Ref. No. 12	Removal of the power supply P.C.B.
Procedure 1→12	 <p>1. Remove the 1 flat cable (CN2). 2. Remove the 4 screws (1~4).</p>

■ MEASUREMENT AND ADJUSTMENT METHODS

Measurement Condition

- Rec. level control; Maximum
- Timer stand-by switch; Off
- Noise reduction select switch; Off
- MPX filter switch; Off

- Balance control; Center
- Make sure heads are clean
- Make sure capstan and pressure roller are clean
- Judgeable room temperature $20\pm5^{\circ}\text{C}$ ($68\pm9^{\circ}\text{F}$)

Measuring instrument

- EVM(Electronic Voltmeter)
- Oscilloscope
- Digital frequency counter
- AF oscillator

- ATT(Attenuator)
- DC voltmeter
- Resistor (600Ω)

Test tape

- Head azimuth adjustment (8kHz, -20dB); QZZCFM
- Tape speed adjustment (3kHz, -10dB); QZZCWAT
- Playback frequency response (315Hz, 12.5kHz, 10kHz, 8kHz, 4kHz, 1kHz, 250Hz, 125Hz, 63Hz, -20dB); QZZCFM

- Playback gain adjustment (315Hz, 0dB); QZZCFM
- Overall frequency response, Overall gain adjustment
Normal reference blank tape; QZZCRA
CrO₂ reference blank tape; QZZCRX
Metal reference blank tape; QZZCRZ

HEAD AZIMUTH ADJUSTMENT

1. Playback the azimuth adjustment portion (8 kHz, -20 dB) of the test tape (QZZCFM). Vary the azimuth adjusting screw until the outputs of the L-CH and R-CH are maximized and the lissajous waveform, as illustrated, approaches 0 degrees.

Note: If L-CH and R-CH are not maximized at the same point, adjust to the point where the levels of each channel are maximized and equal.

2. Perform the same adjustment in the play mode.
3. After the adjustment, apply screwlock to the azimuth adjusting screw.

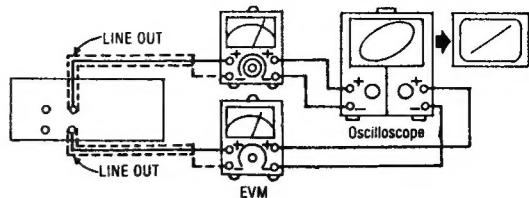


Fig.1

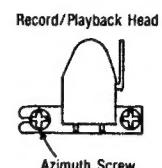


Fig.2

TAPE SPEED ADJUSTMENT

1. Playback the middle portion of the test tape (QZZCWAT).
2. Adjust the **VR901** so that the output is within the standard value.

Standard value: $3000 \pm 15\text{Hz}$

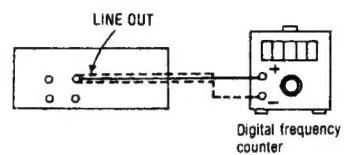


Fig.3

PLAYBACK GAIN ADJUSTMENT

1. Playback the gain adjusted portion (315 Hz, 0 dB) of the test tape (QZZCFM).
2. Adjust **VR1** (L-CH) and **VR2** (R-CH) so that the output is within the standard value.

Standard value: $0.4\text{V} \pm 0.5\text{dB}$

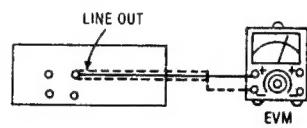


Fig.4

PLAYBACK FREQUENCY RESPONSE

1. Playback the frequency response portion (315 Hz, 12.5 kHz ~ 63 Hz, -20 dB) of the test tape (QZZCFM).
2. Assure that the frequency response is within the range shown in **Fig. 6** for both L-CH and R-CH.

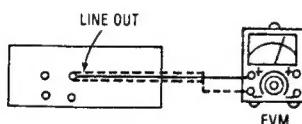


Fig.5

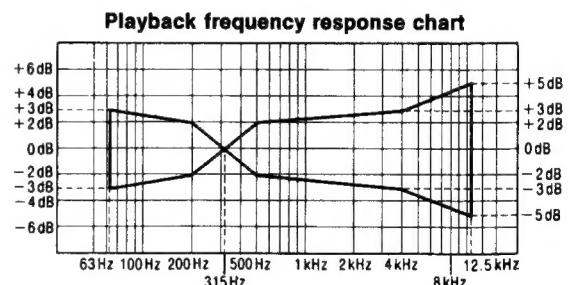


Fig.6

OVERALL GAIN ADJUSTMENT

1. Insert the Normal blank test tape (QZZCRA) and set the unit to the Record pause mode.
2. Apply a reference input signal (1 kHz, -24 dB). Attenuate the output so that its level becomes **0V**.
3. Record this input signal.
4. Playback the signal recorded in step 3 above, and assure that the output is within the standard value.
5. If it is not within the standard value, adjust **VR3** (L-CH) and **VR4** (R-CH).
6. Repeat the step 2 ~ 5 above until the output is within the standard value.

Standard value: $0.4\text{V} \pm 0.5\text{dB}$

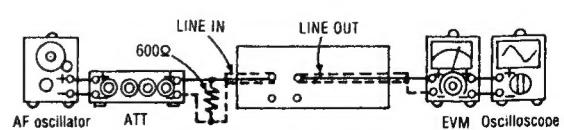
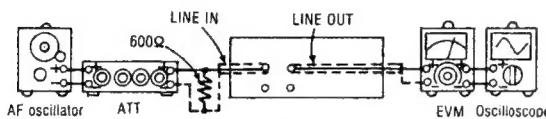
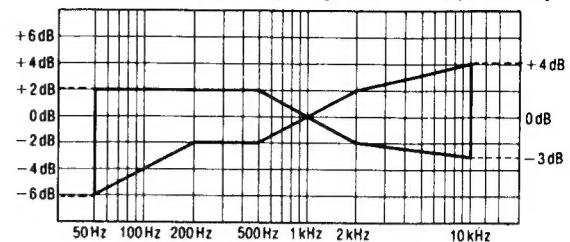
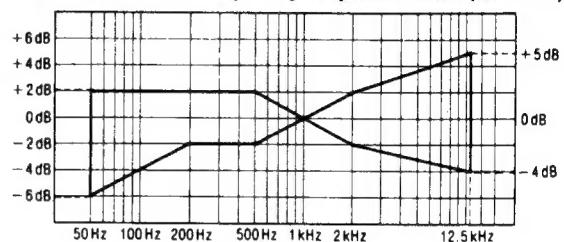
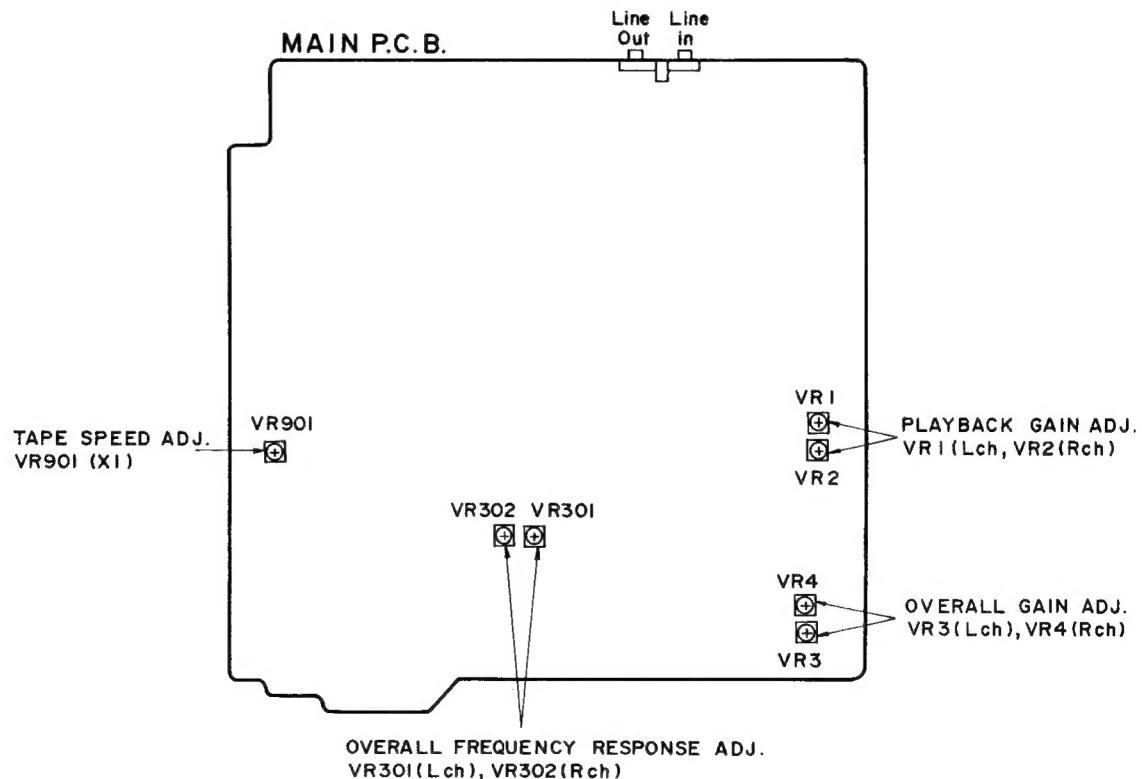


Fig.7

OVERALL FREQUENCY RESPONSE

1. Insert the a Normal blank test tape (QZZCRA) and set the unit to the Record Pause mode.
2. Apply a reference input signal (1 kHz, -24 dB) through an attenuator.
3. Attenuate the signal by 20 dB and adjust the frequency from 50 Hz ~ 10.0kHz.
4. Record the frequency sweep.
5. Playback the recorded signal and assure that it is within the range shown in **Fig.8** in comparison to the reference frequency (1 kHz).
6. If it is not within the standard range, adjust **VR301** (L-CH) and **VR302** (R-CH) so that the frequency level is within the standard range.
7. Repeat steps 2 ~ 6 above using the CrO₂ tape(QZZCRX) and the Metal tape(QZZCRZ) increasing the frequency range to 12.5kHz (50Hz~12.5kHz).
8. Assure that the level is within the range shown in **Fig.9**.

**Fig.10****Normal Overall frequency response chart (NR OUT)****Fig.8****CrO₂·Metal Overall frequency response chart (NR OUT)****Fig.9****• Adjustment points**

■ TERMINAL FUNCTION OF IC

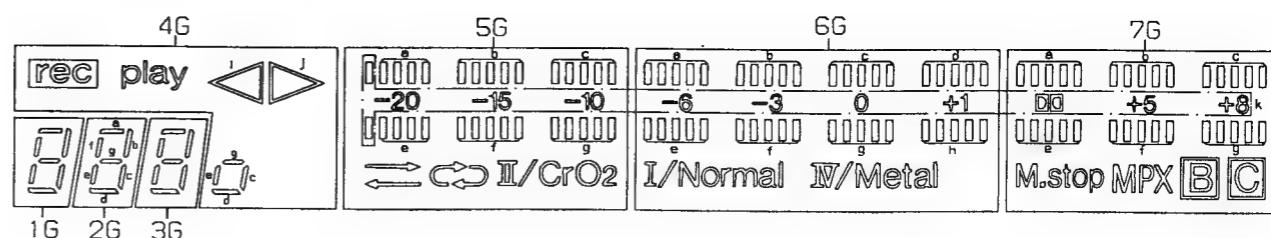
- IC901 (M50940-263SP): Microcomputer

Pin No.	Mark	I/O Division	Function
1	VREF	I	Reference Voltage terminal
2	1 WAY/REV	I	Mechanism select signal (Not used, connected to GND)
3	5.6/8.8	I	Remote control select (Not used, connected to GND)
4	LCH	I	Lch level display
5	RCH	I	Rch level display
6	KEY 2	I	Key SW input
7	KEY 1	I	
8	LTD	I	Reader tape det. signal
9	RPS	I	Rotation pulse det. signal
10	DMT	O	Line out mute signal ("H": ON, "L": OFF)
11	RMT	O	REC AMP mute signal ("H": ON "L": OFF)
12	BOS	O	BIAS OSC ON/OFF control ("H": ON "L": OFF)
13	REC	O	Rec mode signal ("H": Rec "L": other)
14	Ā	O	Dolby NR mode select signal ("L": Dolby C, "H": other)
15	Ā	O	Dolby NR mode select signal ("L": Dolby B, "H": other)
16	Ā	O	MPX ON/OFF control signal ("L": ON, "H": OFF)
17	C/R	O	Cue/rev mode control ("H": cue/rev, "L": other)
18	Ā	I	Remote control signal
19	Ā	I	Auto rec mute key signal ("L": key on, "H" key off)
20	Ā	I	Synchro start signal ("L": start, "H": stop)
21	Ā	I	Auto tape selector signal
22	Ā	I	ATSC ATSM
23	Ā	O	Timer normal or abnormal select signal (Normal: "H", Abnormal: "L")

Pin No.	Mark	I/O Division	Function
24	POF	I	AC POWER off detect signal
25	Ā	O	Rec enable signal ("L": rec, "H": other)
26	CN V _{ss}	—	GND terminal
27	Ā	I	Reset signal ("L": reset)
28	X IN	I	Clock OSC terminal (4MHz)
29	X OUT	O	
30	XC IN	I	(Not used, connected to GND)
31	XC OUT	O	(Not used, open)
32	VSS	—	GND terminal
33	Ā	O	System clock signal (Not used, open)
34	RINH	I	Reverse rec inhibit
35	F INH	I	Forward rec inhibit
36	Ā	I	Mechanism mode SW terminal
37	Ā	I	Cassette half det. SW terminal
38	V _p	I	Reference voltage terminal (Negative voltage)
39	Ā	O	Brake solenoid hold control signal
40	Ā	O	Brake solenoid trigger control signal
41	Ā	O	Trigger solenoid control signal
42	Ā	O	Reel motor control
43	RMR RMF	O	STOP PLAY+FF REW RMR L L H RMF L H L
44	Ā	O	Capstan motor control ("H": ON, "L": OFF)
45	ā ā ā 55	O	FL segment control signal
56	Ā Ā 62	O	FL grid control signal
63	Ā	—	Power supply terminal (Positive voltage)
64	Ā	—	Power supply terminal (Positive voltage)

■ INTERNAL CONNECTION OF FL

- Grid connection diagram



- Anode connection table

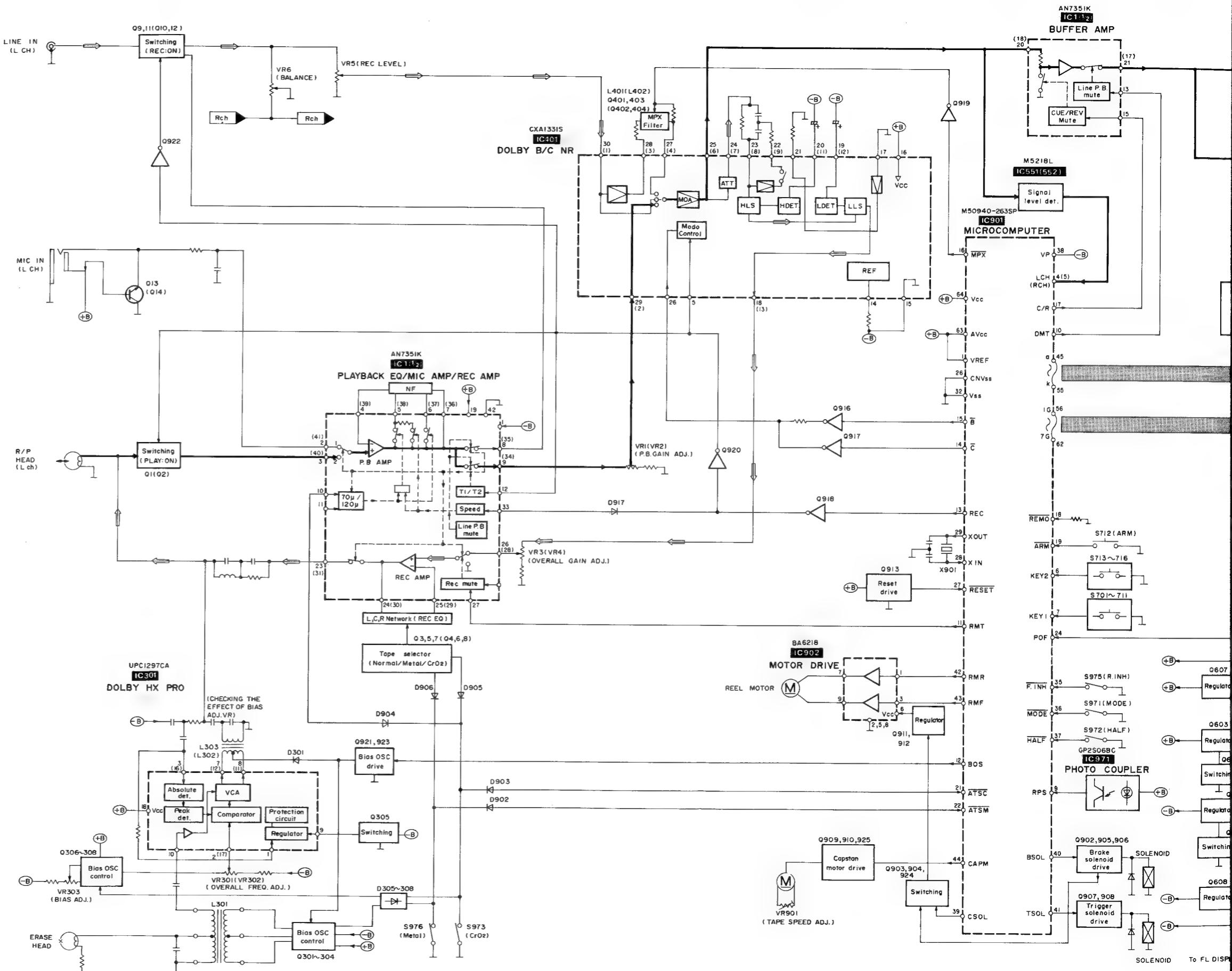
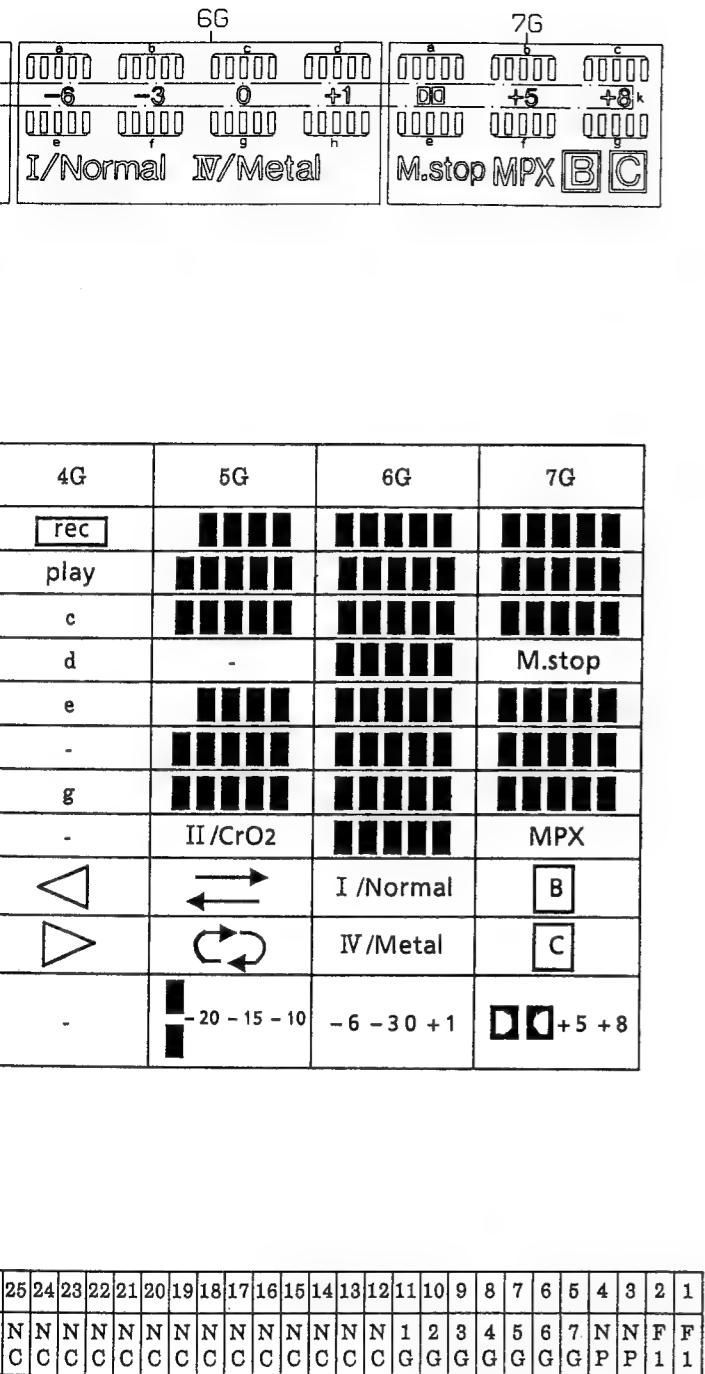
	1G	2G	3G	4G	5G	6G	7G
a	a	a	a	rec			
b	b	b	b	play			
c	c	c	c	c			
d	d	d	d	d			M.stop
e	e	e	e	e			
f	f	f	f	-			
g	g	g	g	g			
h	-	-	-	-	II/CrO2		MPX
i	-	-	-		↔	I/Normal	B
j	-	-	-		→	↔	IV/Metal
k	-	-	-	-	-20 -15 -10	-6 -3 0 +1	+5 +8

- Pin connection

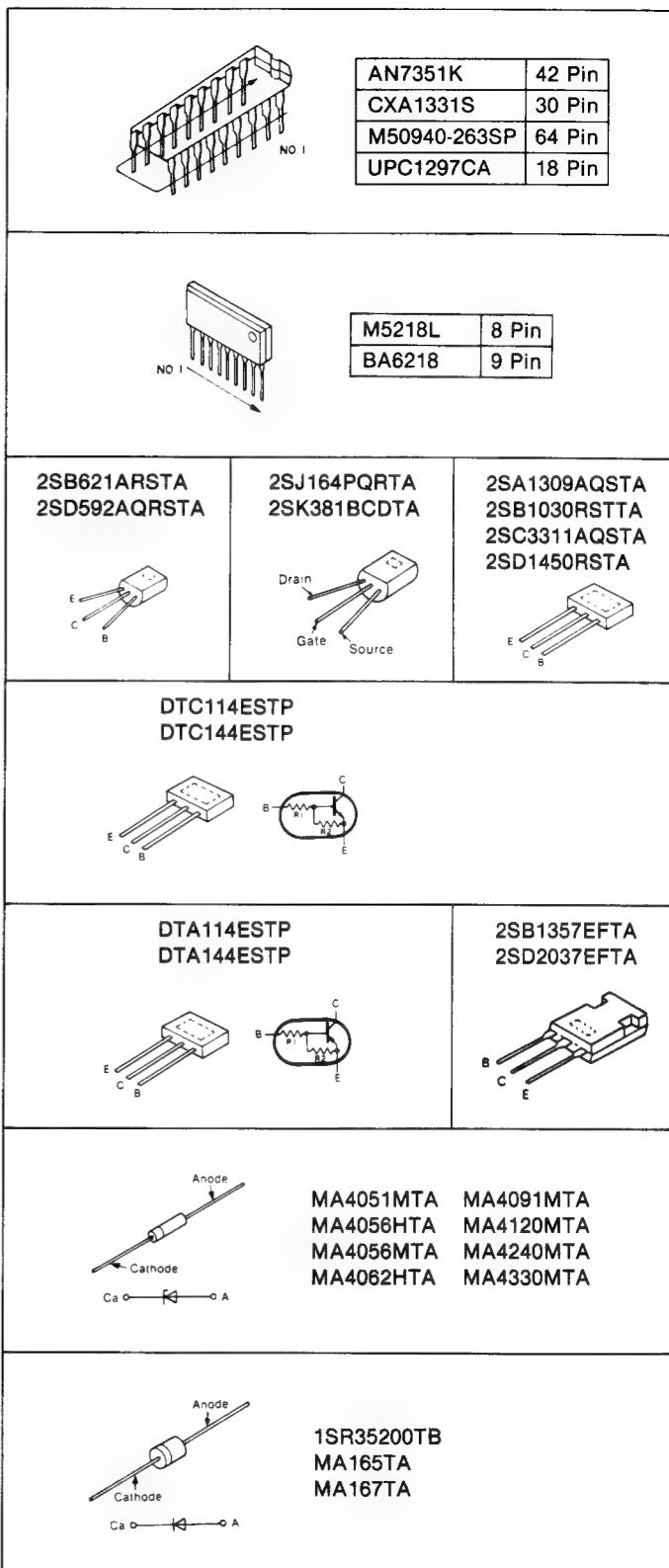
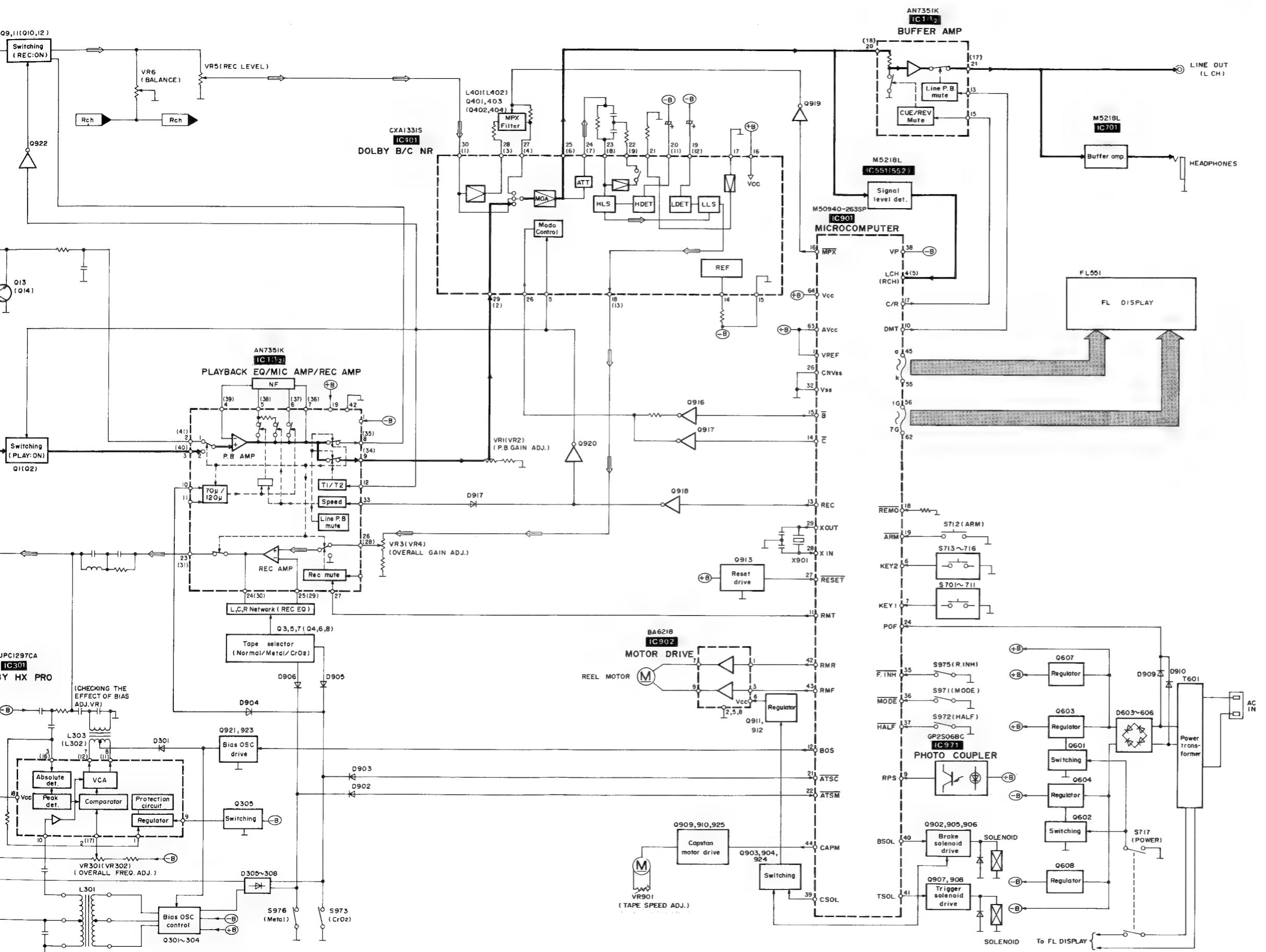
PIN NO.	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
CONNECTION	F 2	F 2	N P	N P	a	b	c	d	e	f	g	h	i	j	k	N C	F 1																									

Note
 1.)NP.....No pin.
 2.)F1,F2.....Filament
 3.)1G~7G.....Grid
 4.)NC.....No connection

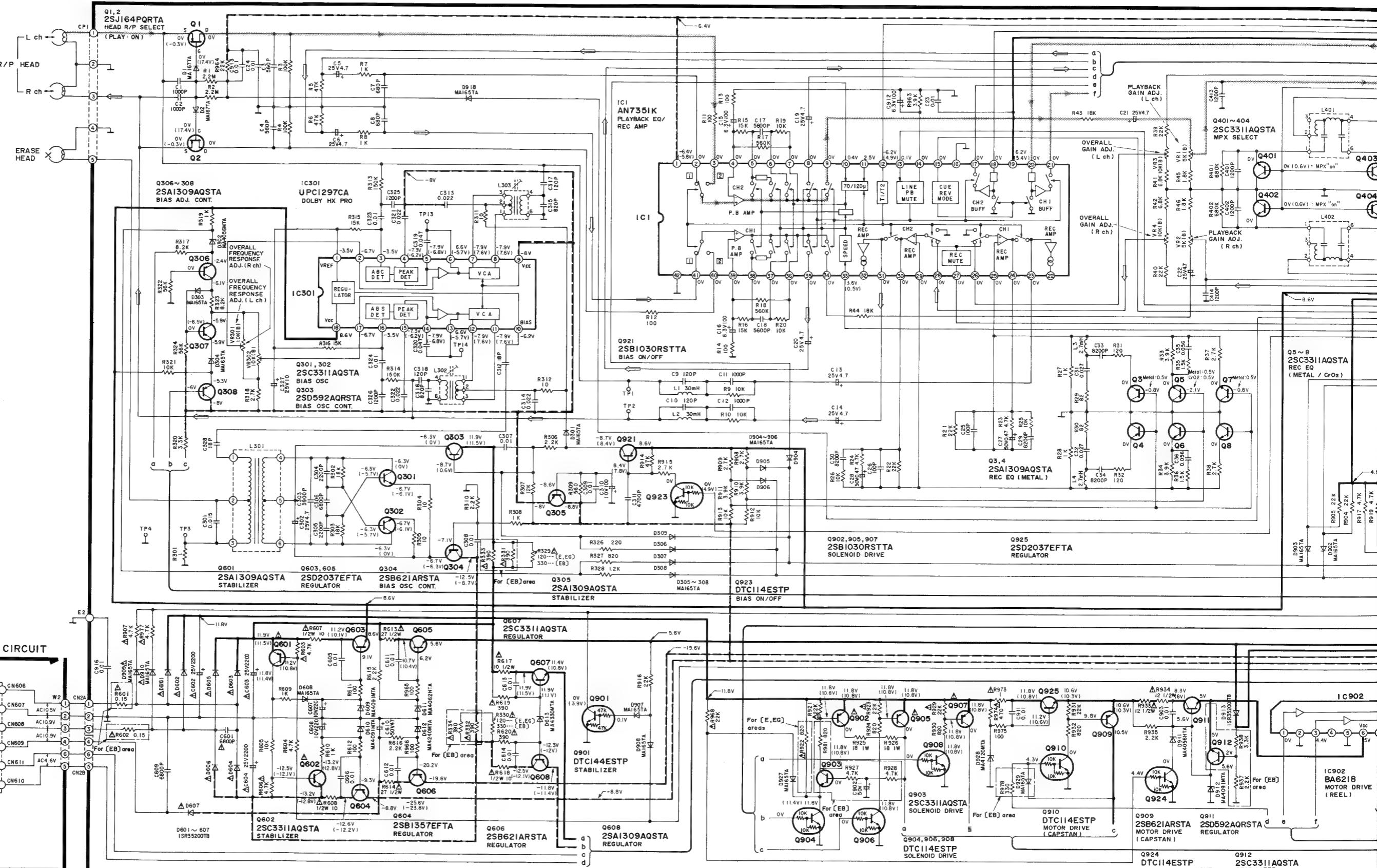
■ BLOCK DIAGRAM

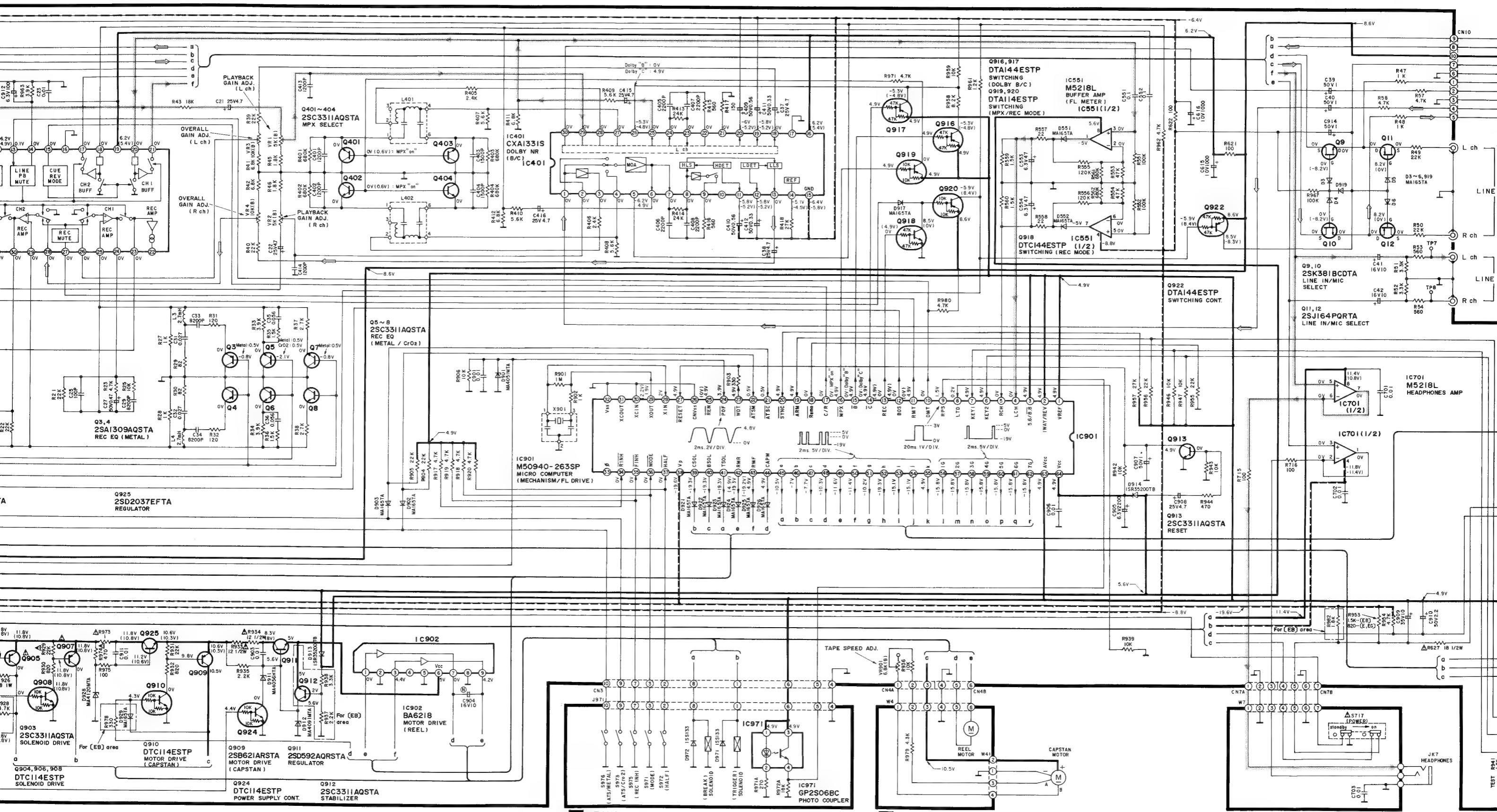


■ TERMINAL GUIDE OF IC'S, TRANSISTORS AND DIODES



A MAIN CIRCUIT

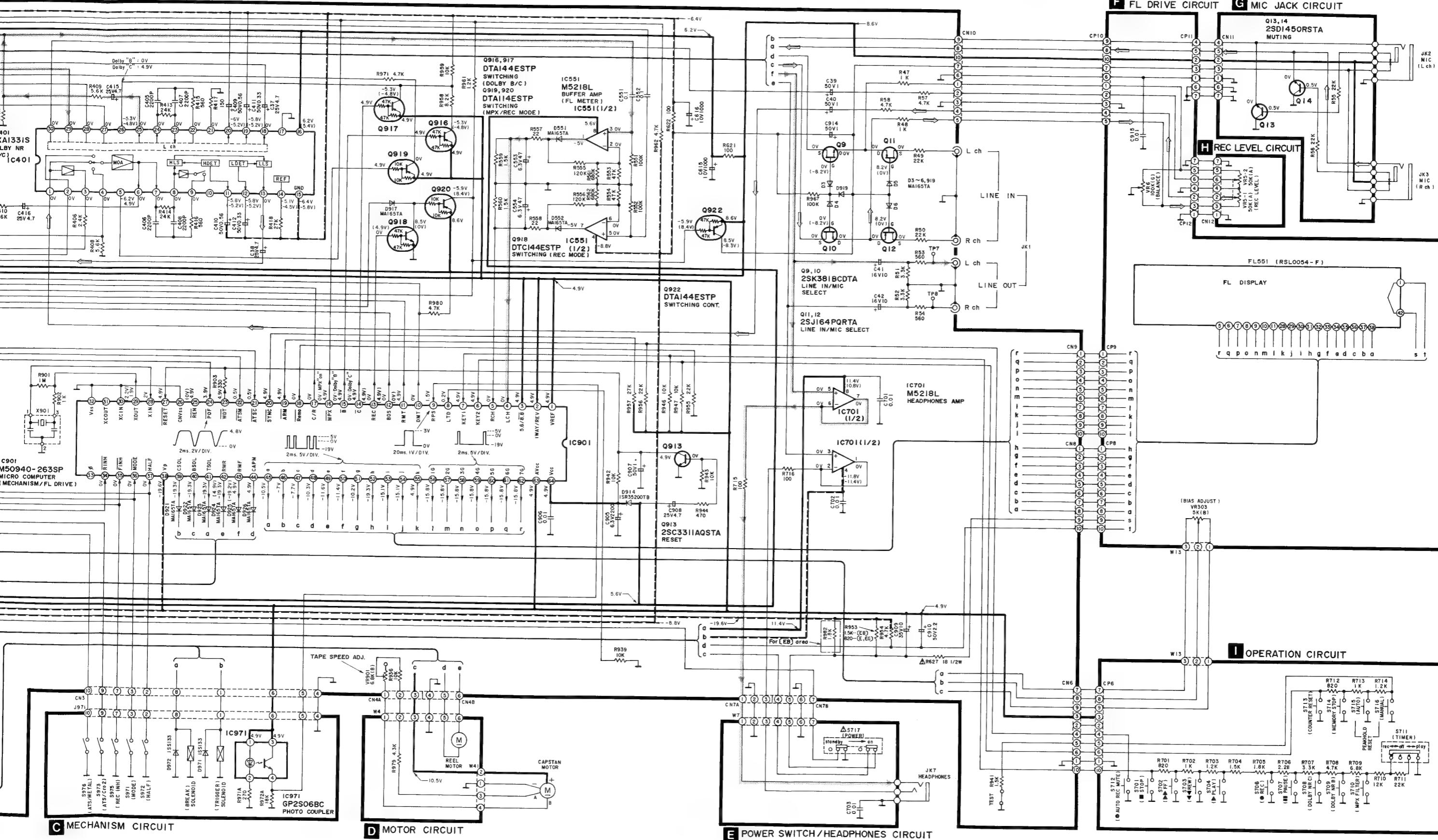




C MECHANISM CIRCUIT

MOTOR CIRCUIT

E POWER SWITCH / HEADPHONES CIRCUIT



■ SCHEMATIC DIAGRAM

(Parts list on pages 27, 28, 35, 36.)

(This schematic diagram may be modified at any time with development of new technology.)

Notes:

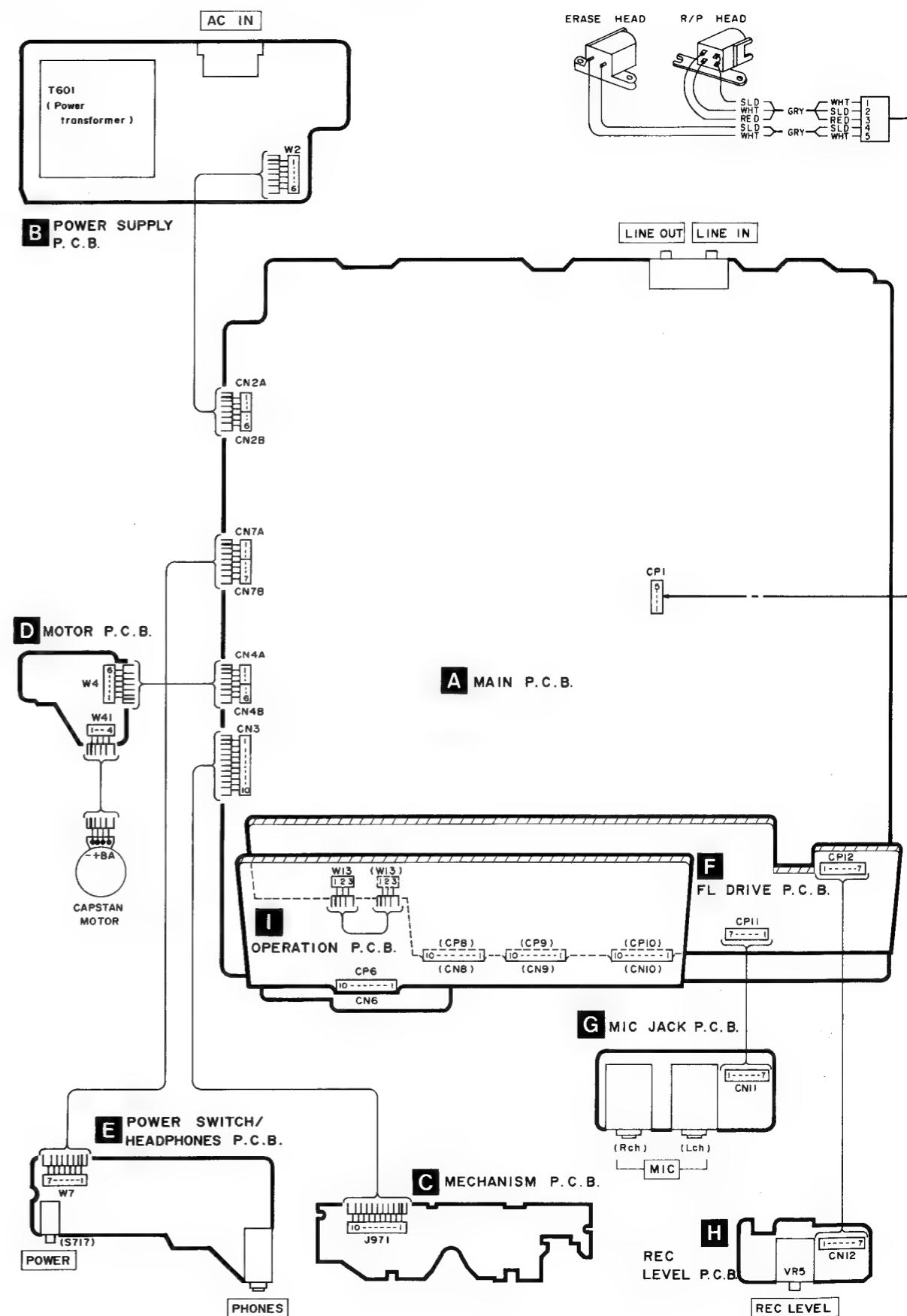
- S701 : Stop switch (stop) in "off" position.
- S702 : Fast-forward/cue switch (ff) in "off" position.
- S703 : Rewind/review switch (rew) in "off" position.
- S704 : Playback switch (play) in "off" position.
- S706 : Record switch (rec) in "off" position.
- S707 : Pause switch (pause) in "off" position.
- S708, 709 : Dolby noise-reduction switches in "off" position.
[S708: Dolby NR C]
[S709: Dolby NR B]
- S710 : Multiplex filter switch (MPX filter) in "off" position.
- S711 : Timer switch (timer) in "off" position.
- S712 : Automatic-record-muting switch (auto rec mute) in "off" position.
- S713 : Counter reset switch (counter reset) in "off" position.
- S714 : Memory-stop switch (memory stop) in "off" position.
- S715, 716 : Peak hold reset switches.
[S715: auto]
[S716: manual]
- S717 : Power switch (power) in "on" position.
- S971 : Mode switch in "off" position.
- S972 : Cassette half detection switch in "off" position.
- S973 : ATS (CrO₂) switch in "off" position.
- S975 : Rec Inhibit switch in "off" position.
- S976 : ATS (Metal) switch in "off" position.

- Resistance are in ohms (Ω), 1/4 watt unless specified otherwise.
1K=1,000 (Ω), 1M=1,000k (Ω)
- Capacity are in micro-farads (μF) unless specified otherwise.
- All voltage values shown in circuitry are under no signal condition and playback mode with volume control at minimum position otherwise specified.
()Voltage values at record mode.
For measurement use EVM.
- Important safety notice
Components identified by **Δ** mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.
- (—) indicates +B (bias).
- (— —) indicates -B (bias).
- (→) indicates the flow of the playback signal.
- (→) indicates the flow of the record signal.

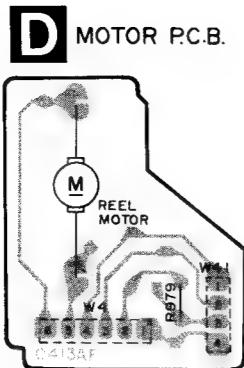
* Caution!

IC and LSI are sensitive to static electricity.
Secondary trouble can be prevented by taking care during repair.
* Cover the parts boxes made of plastics with aluminum foil.
* Ground the soldering iron.
* Put a conductive mat on the work table.
* Do not touch the legs of IC or LSI with the fingers directly.

■ WIRING CONNECTION DIAGRAM



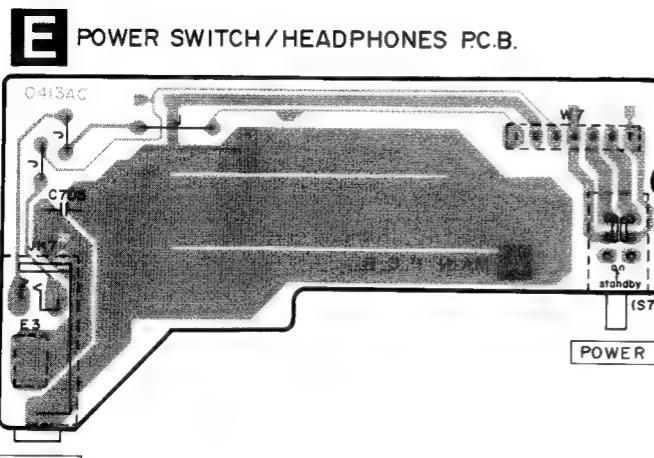
■ PRINTED CIRCUIT BOARDS



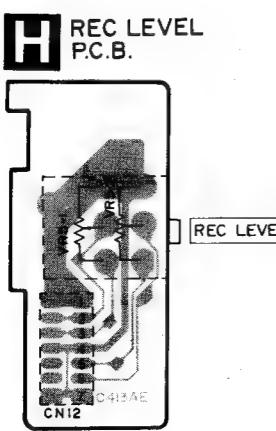
D MOTOR P.C.B.



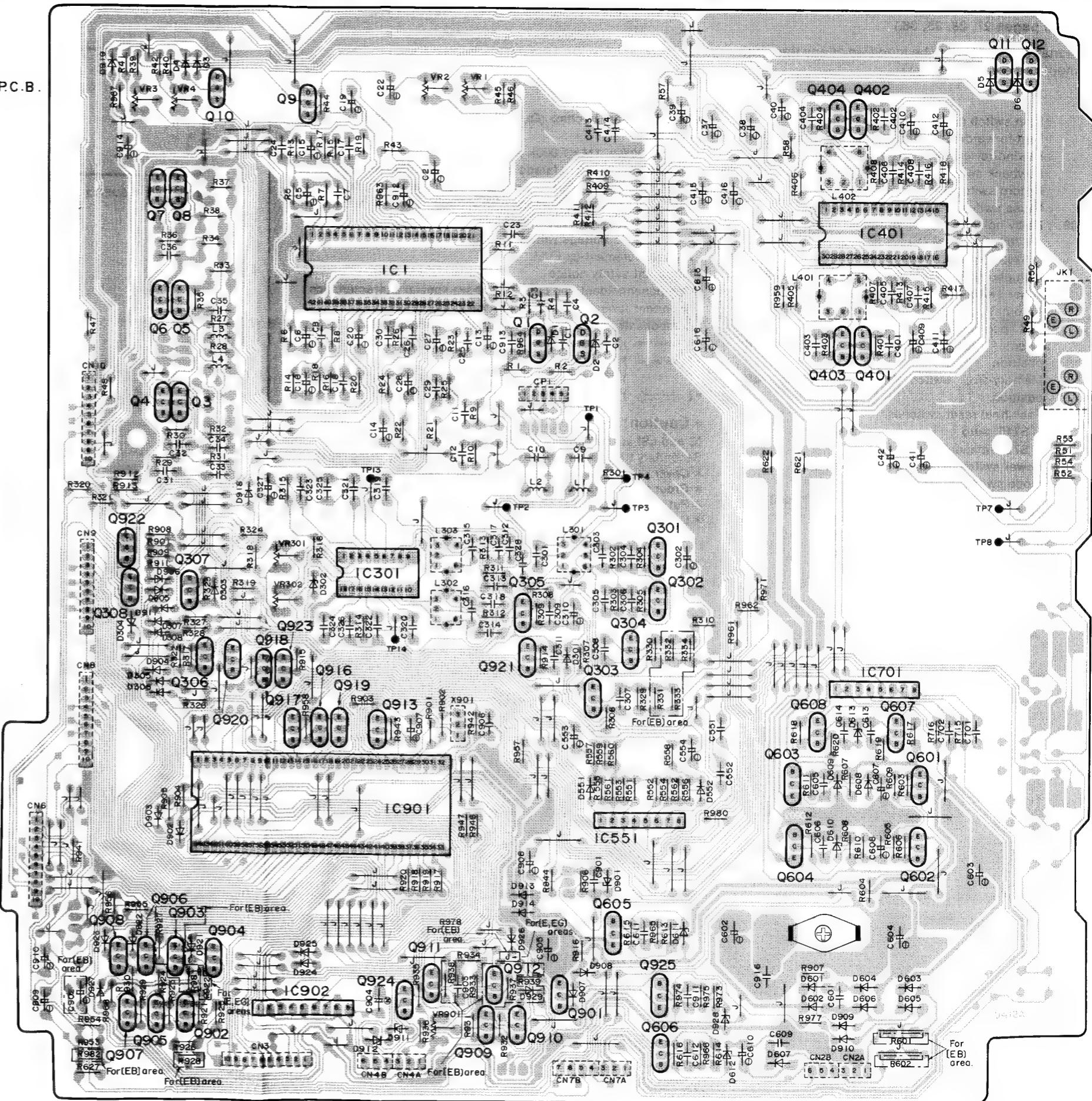
A MAIN P.C.B.



E POWER SWITCH/HEADPHONES P.C.B.

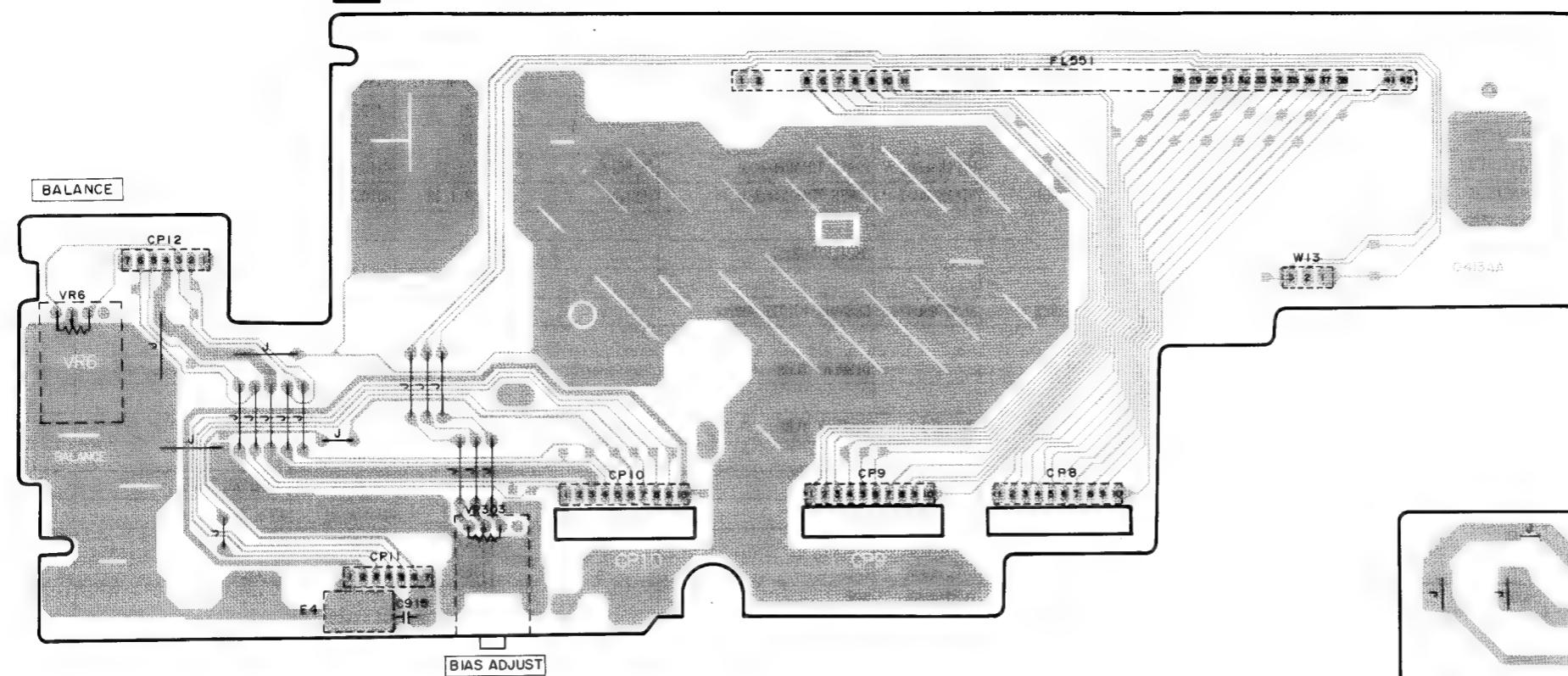


H REC LEVEL
PC B

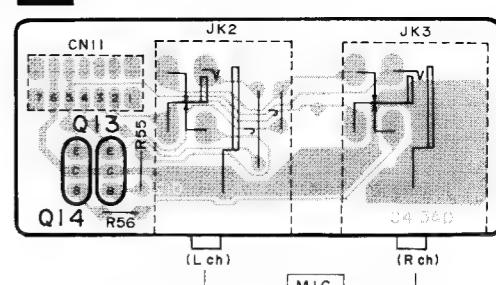


11 12 13 14 15 16 17 18 19

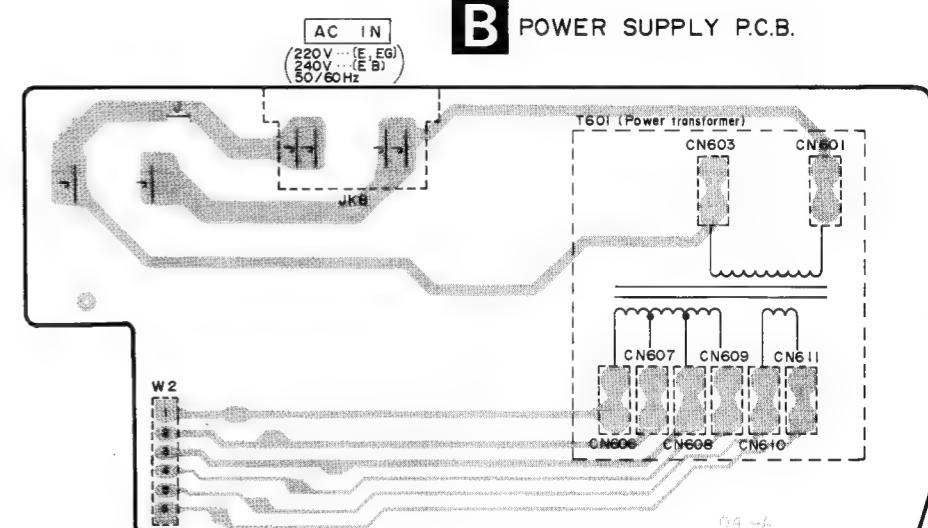
F FL DRIVE P.C.B.



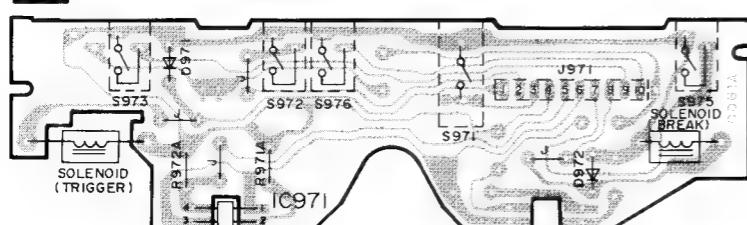
G MIC JACK P.C.B.



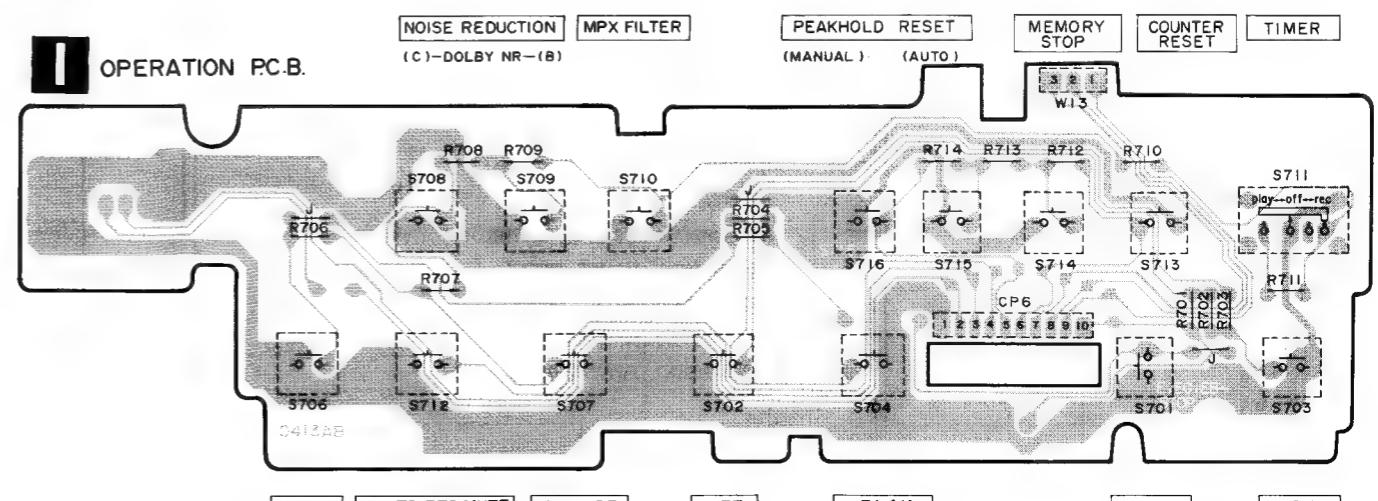
B POWER SUPPLY P.C.B.



C MECHANISM P.C.B.



I OPERATION P.C.B.



■ REPLACEMENT PARTS LIST

Notes : * **Important safety notice:**
Components identified by Δ mark have special characteristics important for safety. When replacing any of these components use only manufacturer's specified parts.
* The parenthesized indications in the Remarks columns specify the areas. (Refer to the cover page for area.)
Parts without these indications can be used for all areas.

Ref. No.	Part No.	Part Name & Description	Remarks	Ref. No.	Part No.	Part Name & Description	Remarks
L301	SL09B4-K	COIL		CN11, 12	RJU057W007	SOCKET(7P)	
L302, 303	SL09B1-K	COIL		CN601	RJS1A1101	SOCKET(1P)	
L401, 402	QLM9Z10K	COIL		CN603	RJS1A1101	SOCKET(1P)	
		TRANSFORMER(S)		CN606-611	RJS1A1101	SOCKET(1P)	
T601	RTP1K4E008-V	POWER TRANSFORMER	(E, EG) Δ	CP1	SJTD513	CONNECTOR(5P)	
T601	RTP1K4B007-V	POWER TRANSFORMER	(EB) Δ	CP6	RJT003K010M1	CONNECTOR(10P)	
		OSCILLATOR(S)		CP8-10	RJT003K010M1	CONNECTOR(10P)	
		DISPLAY TUBE		CP11, 12	RJT057W007	CONNECTOR(7P)	
X901	EF0GC4004T4	CERAMIC FILTER (4MHz)				GND PART(S)	
		DISPLAY TUBE					
FL551	RSL0054-F	DISPLAY TUBE					
		SWITCH(ES)		E1, 2	SNE1004-1	GND PLATE	
S701	EVQ21405R	STOP		E3	SUSD165	GND SPRING	
S702	EVQ21405R	F. F.		E4	RMC0089	GND SPRING	
S703	EVQ21405R	REW.				JACK(S)	
S704	EVQ21405R	PLAYBACK		JK1	SJF3069N	TERMINAL BOARD	
S706	EVQ21405R	REC		JK2, 3	RJJ65MS01	JACK, MIC (L), (R)	
S707	EVQ21405R	PAUSE		JK7	SJJ146B	JACK, HEADPHONES	
S708	EVQ21405R	DOLBY NR C		JK8	SJS9236	AC INLET	Δ
S709	EVQ21405R	DOLBY NR B					
S710	EVQ21405R	MPX					
S711	SSS166	TIMER					
S712	EVQ21405R	AUTO REC MUTE					
S713	EVQ21405R	COUNTER RESET					
S714	EVQ21405R	MEMORY STOP					
S715	EVQ21405R	PEAK HOLD RESET(AUTO)					
S716	EVQ21405R	PEAK HOLD RESET(MANUAL)					
S717	SSH1230	POWER	Δ				
S971	RSH1A89Z	MODE					
S972	RSH1A90Z	HALF					
S973	RSH1A90Z	ATS					
S975	RSH1A90Z	REC INHIBIT					
S976	RSH1A90Z	ATS					
		CONNECTOR(S) AND SOCKET(S)					
CN2A	RJS1A1703	CONNECTOR(3P)					
CN2B	RJS1A1703	CONNECTOR(3P)					
CN3	SJSD1005	CONNECTOR(10P)					
CN4A	RJS1A1703	CONNECTOR(3P)					
CN4B	RJS1A1703	CONNECTOR(3P)					
CN6	RJU003K010M1	SOCKET(10P)					
CN7A	RJS1A1703	CONNECTOR(3P)					
CN7B	RJS1A1704	CONNECTOR(4P)					
CN8-10	RJU003K010M1	SOCKET(10P)					

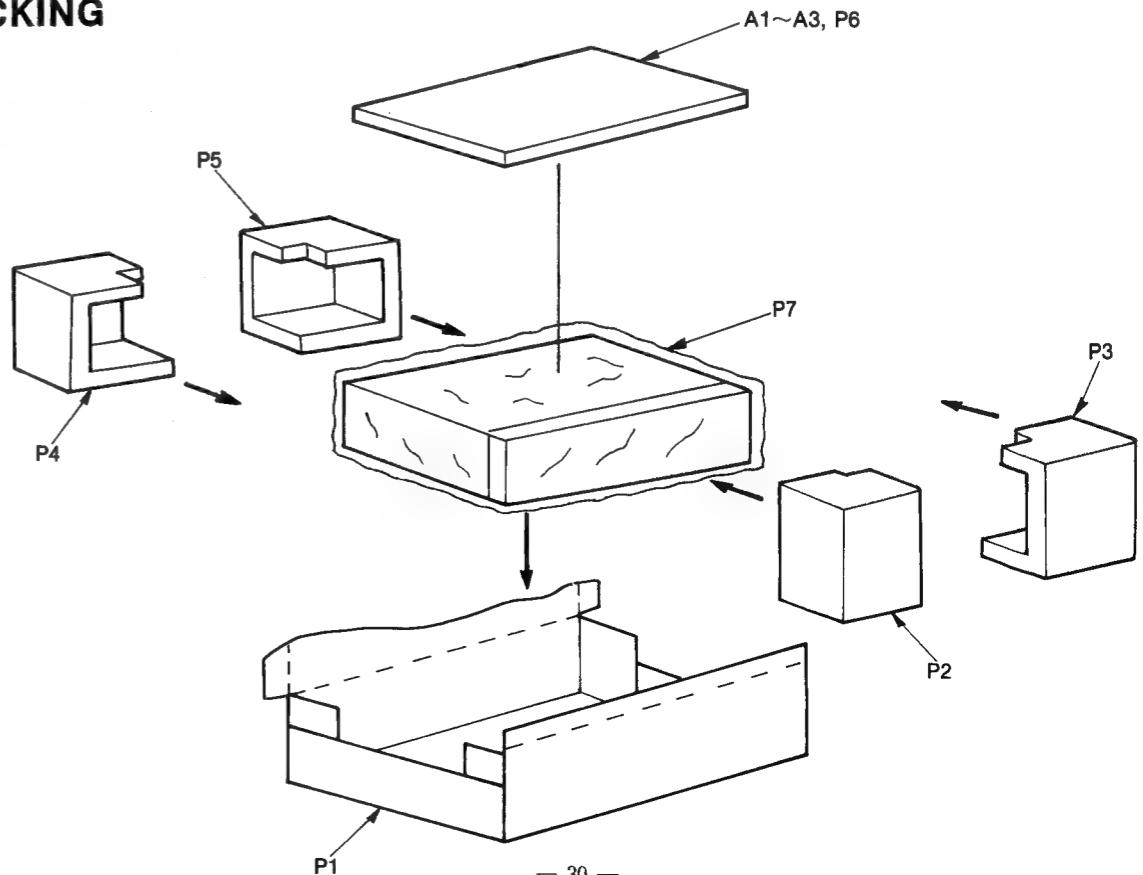
Notes : * Important safety notice:
 Components identified by Δ mark have special characteristics important for safety. When replacing any of these components use only manufacturer's specified parts.
 * The parenthesized indications in the Remarks columns specify the areas. (Refer to the cover page for area.)
 Parts without these indications can be used for all areas.

Ref. No.	Part No.	Part Name & Description	Remarks
		CABINET AND CHASSIS	
1	RKMD036-K	CABINET	
2	RYF0088A	CASSETTE LID	
3	SNE2129-1	SCREW	
4	XTBS3+8JF21	SCREW	
5	RMN0080	FL. HOLDER	
6	RGR0024E-A	REAR PANEL	(E)
6	RGR0024E-B	REAR PANEL	(EB)
6	RGR0024E-C	REAR PANEL	(EG)
7	RGU0030	BUTTON, POWER	
8	RGV0022	KNOB, TIMER	
9	RGW0032	KNOB, BALANCE LEVEL	
10	RGW0033	KNOB, REC LEVEL	
11	RKA009-1	FOOT	
12	RFKNSB465EAK	FRONT GRILLE ASS'Y(1)	
12-1	RKW0038	TRANSPARENT PLATE	
13	RFKNSB465EBK	FRONT GRILLE ASS'Y(2)	
14	RMC0040-1	BRACKET	
15	RMC0056	SHIELD PLATE	
16	RMK0026-3	CHASSIS	
17	RMN0022	ORNAMENT	
18	RFKGSB465E-K	FRONT PANEL ASS' Y	
19	RGK0117B	ORNAMENT, BUTTON(A)	
20	RGK0278A	ORNAMENT, BUTTON(B)	
21	RGU0130	BUTTON, EJECT	
22	RFKNSB465ECK	BUTTON ASS' Y, COUNTER	
23	RFKNSB465EDK	BUTTON ASS' Y, NR	
24	RGU0133A	BUTTON, OPERATION	
25	RKF0020A-3	CASSETTE HOLDER	
25-1	QBP2006A	SPRING, TAPE PRESSURE	
26	RME0034	SPRING	
27	RML0086	EJECT LEVER	
28	RMR0153	DAMPER GEAR ASS' Y	
29	XTB3+10JF2	SCREW	
30	SUD444-1	WASHER	
31	SHE187-2	HOLDER	
32	SNE4021-1	NUT	
33	XTB3+6G	SCREW	
34	XTB3+20JF2	SCREW	
35	XTB3+8JF2	SCREW	
36	XTB26+4FF2	SCREW	
		PACKING MATERIAL	
P1	RPG0519	CARTON BOX	

Ref. No.	Part No.	Part Name & Description	Remarks
P2	RPN0345A	PAD (A)	
P3	RPN0345B	PAD (B)	
P4	RPN0345C	PAD (C)	
P5	RPN0345D	PAD (D)	
P6	SPSD152	PAD, ACCESSORIES	
P7	SPP756	PROTECTION COVER	
		ACCESSORIES	
A1	RQF0700	INSTRUCTION MANUAL	(E)
A1	RQF0701	INSTRUCTION MANUAL	(EB)
A1	RQF0702	INSTRUCTION MANUAL	(EG)
A1-1	RFKSSB465E-K	INSTRUCTION MANUAL	(E)
A1-1	RQT0580-B	INSTRUCTION MANUAL	(EB)
A1-1	RQT0581-D	INSTRUCTION MANUAL	(EG)
A1-2	RQA0013	WARRANTY CARD	
A1-3	RQCBO169	SERVICENTER LIST	
A2	SFDAC05E03	POWER CORD	(E, EG) Δ
A2	SJA193-1	POWER CORD	(EB) Δ
A3	SJP2249-3	STEREO CONNECTION CABLE	

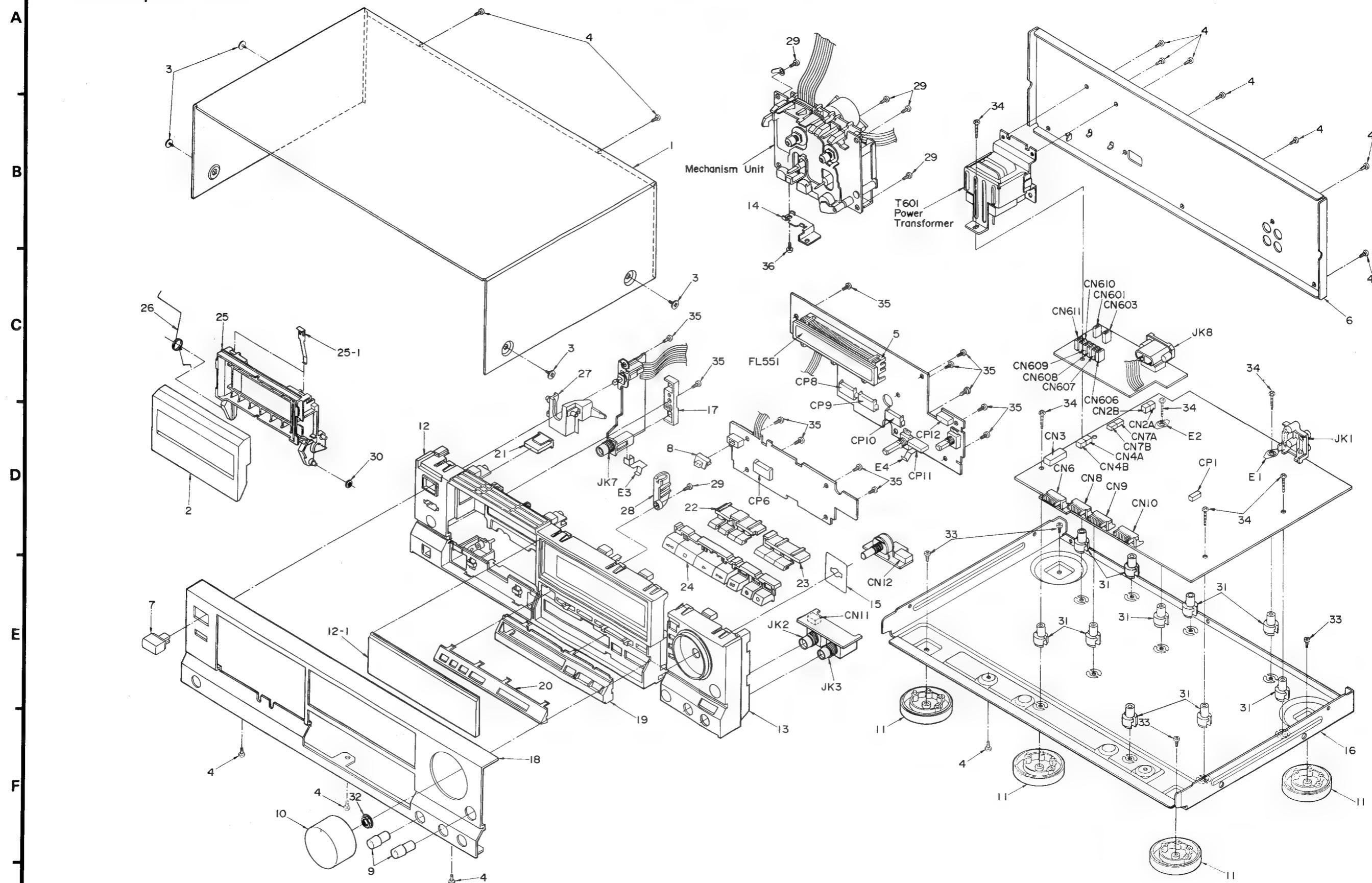
Ref. No.	Part No.	Part Name & Description	Remarks	Ref. No.	Part No.	Part Name & Description	Remarks
		MECHANISM PARTS LIST					
101	QHQ1361A	SCREW		124	XTN26+7J	SCREW	
102	SJH96-1	E HEAD		125	XTN26+26F	SCREW	
103	RHE5201ZA	SCREW		126	RMA0048	FLYWHEEL PLATE	
104	RJH4C35GZAM	R/P HEAD		127	RMD5014Z	ANGLE	
105	QBC1278A	SPRING		128	XSN26+3	SCREW	
106	RHM278ZA	SPACER		129	RHG3032Z	RUBBER CUSHION	
107	RMD5013ZC	HEAD SPACER		130	RHD26002	SCREW	
108	XTN2+5F	SCREW		131	RUB428Z	MOVING IRON CORE	
109	REX0227	LEAD WIRE BLOCK		132	RSJ0003	SOLENOID	
110	RXH0001	REEL TABLE		133	XTW2+8S	SCREW	
111	RW139ZA	SPRING		134	RXQ0011	BRAKE SOLENOID	
112	RMA0047B	HEAD BASE		135	XTN26+4F	SCREW	
113	RXQ0078	MAIN ROD ASS'Y		136	RDG0030	MAIN GEAR	
114	RMM0012-2	EJECT ROD(L)		137	RXG0009	GEAR	
115	RME0018-1	SPRING		138	RXF0007	FLYWHEEL (F)	
116	RUB502Z	LEVER		139	RDV109ZA	CAPSTAN BELT	
117	RME0020	SPRING		140	RDG0034	REEL MOTOR GEAR	
118	RXL0007	BRAKE LEVER		141	RXG0003	REEL TABLE GEAR	
119	RW142ZA	SPRING		142	RUQ112ZA	SPRING	
120	RXP0004	PINCH ROLLER ARM		143	RDG0033	REEL TABLE GEAR	
120-1	RW1402B	SPRING		144	RUQ111ZA	SPRING	
121	RFKRSB555E-K	CHASSIS ASS'Y		145	RML0037	LEVER	
122	MN-6F4RA88	REEL MOTOR		146	RW147ZA	SPRING	
123	RFM133ZA	DC MOTOR		147	RUS609Z	TAPE PRESSURE SPRING	
				148	RJS10T7ZA	CONNECTOR (10P), J971	

■ PACKING



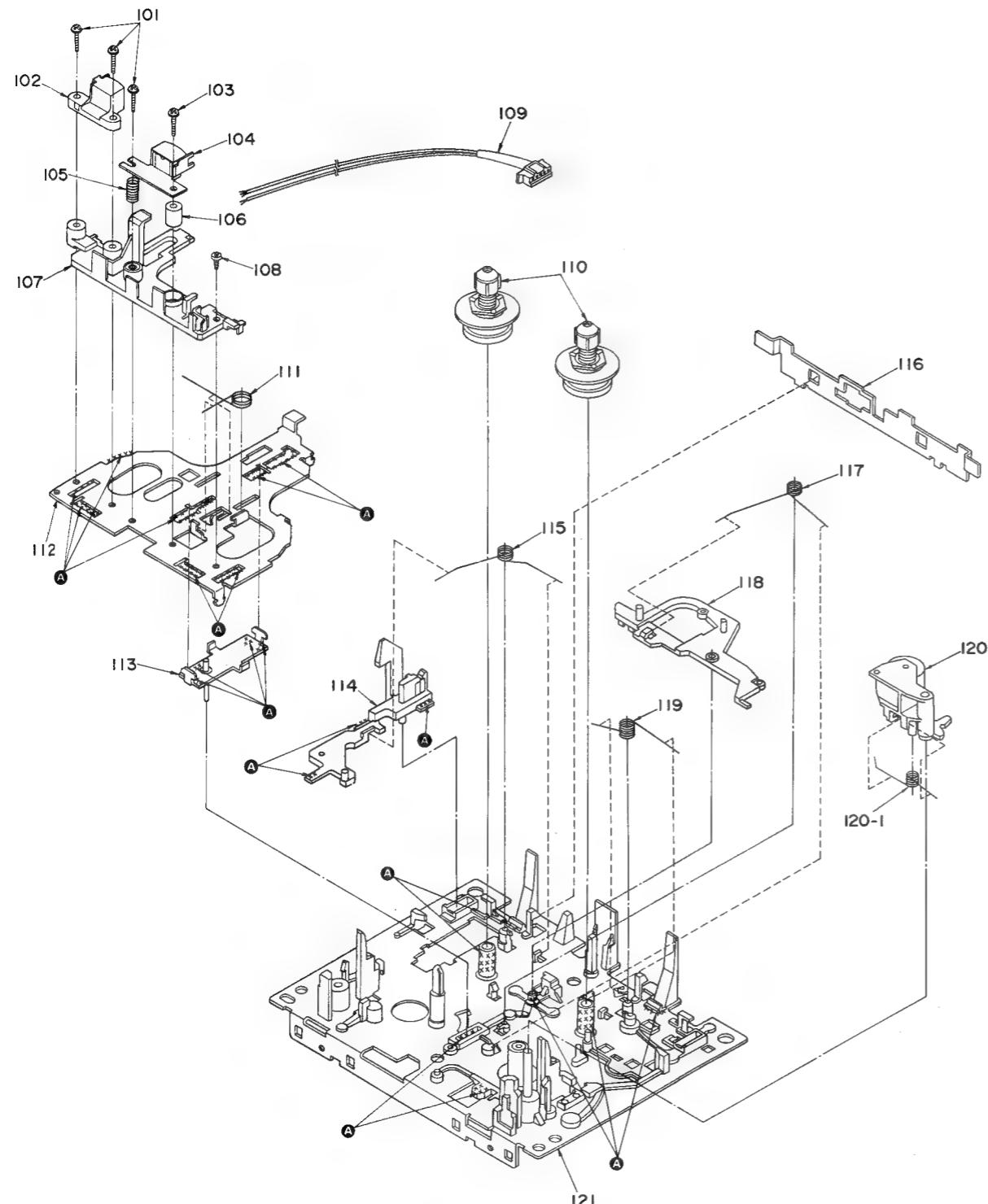
■ EXPLODED VIEWS

- Cabinet parts

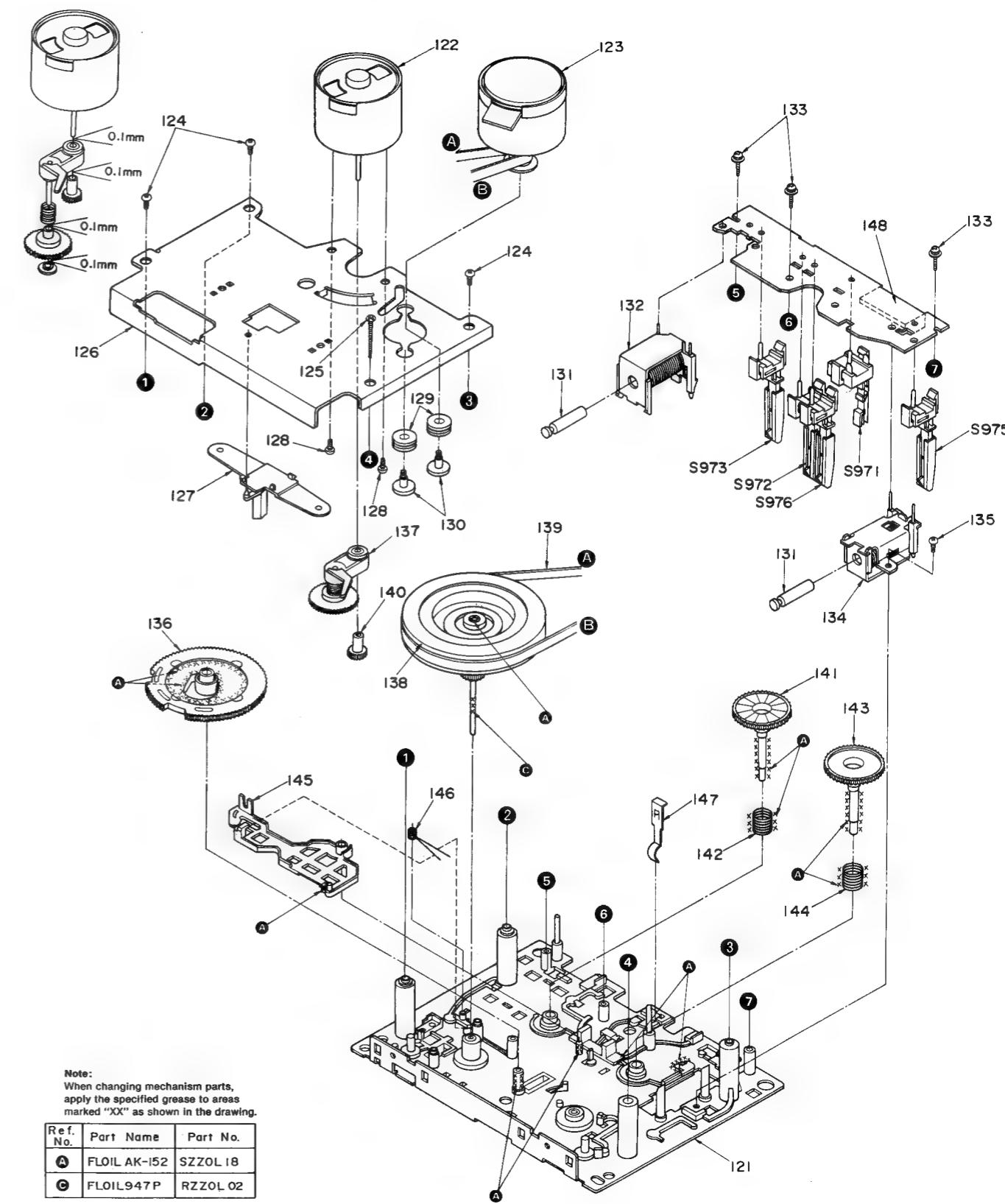


11 12 13 14 15 16 17 18 19

• Mechanical parts
(Top view)



(Bottom view)



Note:
When changing mechanism parts,
apply the specified grease to areas
marked "XX" as shown in the drawing.

Ref. No.	Part Name	Part No.
Ⓐ	FLOIL AK-152	SZZOL 18
Ⓒ	FLOIL947P	RZZOL 02

■ RESISTORS & CAPACITORS

Notes : * Capacity value are in microfarads (μ F) unless specified otherwise, P=Pico-farads (μ F) F=Farads (F)
 * Resistance values are in ohms, unless specified otherwise, 1K=1,000 (OHM) , 1M=1,000k (OHM)

Ref. No.	Part No.	Values & Remarks	Ref. No.	Part No.	Values & Remarks	Ref. No.	Part No.	Values & Remarks
			R324	ERDS2TJ563T	1/4W 56K	R712	ERDS2TJ821T	1/4W 820
RESISTORS			R326	ERDS2TJ221T	1/4W 220	R713	ERDS2TJ102T	1/4W 1K
R1, 2	ERDS2TJ225T	1/4W 2. 2M	R327	ERDS2TJ821T	1/4W 820	R714	ERDS2TJ122T	1/4W 1. 2K
R3, 4	ERDS2TJ104T	1/4W 100K	R328	ERDS2TJ122T	1/4W 1. 2K	R715, 716	ERDS2TJ101T	1/4W 100
R5, 6	ERDS2TJ473T	1/4W 47K	R329, 330	ERDS1FVJ121T	1/2W 120 (E, EG)△	R901	ERDS2TJ105T	1/4W 1M
R7, 8	ERDS2TJ102T	1/4W 1K	R329, 330	ERDS1FVJ331T	1/2W 330 (EB)△	R902	ERDS2TJ102T	1/4W 1K
R9, 10	ERDS2TJ103T	1/4W 10K	R331-334	ERDS1FVJ391T	1/2W 390 (EB)△	R903	ERDS2TJ331T	1/4W 330
R11-14	ERDS2TJ101T	1/4W 100	R401-404	ERDS2TJ684T	1/4W 680K	R904, 905	ERDS2TJ223T	1/4W 22K
R15, 16	ERDS2TJ153T	1/4W 15K	R405, 406	ERDS2TJ242T	1/4W 2. 4K	R906	ERDS2TJ103T	1/4W 10K
R17, 18	ERDS2TJ564T	1/4W 560K	R407-410	ERDS2TJ562T	1/4W 5. 6K	R907	ERDS2TJ472T	1/4W 4. 7K △
R19, 20	ERDS2TJ103T	1/4W 10K	R411, 412	ERDS2TJ682T	1/4W 6. 8K	R908, 909	ERDS2TJ272T	1/4W 2. 7K
R21, 22	ERDS2TJ223T	1/4W 22K	R413, 414	ERDS2TJ243T	1/4W 24K	R910, 911	ERDS2TJ392T	1/4W 3. 9K
R23, 24	ERDS2TJ472T	1/4W 4. 7K	R415, 416	ERDS2TJ561T	1/4W 560	R912, 913	ERDS2TJ103T	1/4W 10K
R25, 26	ERDS2TJ103T	1/4W 10K	R417	ERDS2TJ151T	1/4W 150	R914	ERDS2TJ473T	1/4W 47K
R27, 28	ERDS2TJ102T	1/4W 1K	R418	ERDS2TJ273T	1/4W 27K	R915	ERDS2TJ272T	1/4W 2. 7K
R29, 30	ERDS2TJ820T	1/4W 82	R551, 552	ERDS2TJ104T	1/4W 100K	R916	ERDS2TJ223T	1/4W 22K
R31, 32	ERDS2TJ121T	1/4W 120	R553, 554	ERDS2TJ473T	1/4W 47K	R917-920	ERDS2TJ472T	1/4W 4. 7K
R33, 34	ERDS2TJ392T	1/4W 3. 9K	R555, 556	ERDS2TJ124T	1/4W 120K	R921	ERDS2TJ223T	1/4W 22K △
R35, 36	ERDS2TJ152T	1/4W 1. 5K	R557, 558	ERDS2TJ220T	1/4W 22	R922	ERDS2TJ821T	1/4W 820 (E, EG)△
R37, 38	ERDS2TJ272T	1/4W 2. 7K	R559, 560	ERDS2TJ152T	1/4W 1. 5K	R923	ERDS2TJ223T	1/4W 22K △
R39, 40	ERDS2TJ223T	1/4W 22K	R561, 562	ERDS2TJ684T	1/4W 680K	R924	ERDS2TJ821T	1/4W 820
R41, 42	ERDS2TJ682T	1/4W 6. 8K	R601, 602	ERQ16NKWR15E	1/6W 0. 15 (EB)△	R925, 926	ERG1S1J180E	1W 18
R43, 44	ERDS2TJ183T	1/4W 18K	R603	ERDS2TJ472T	1/4W 4. 7K △	R927, 928	ERDS2TJ472T	1/4W 4. 7K (EB)
R45, 46	ERDS2TJ182T	1/4W 1. 8K	R604	ERDS2TJ472T	1/4W 4. 7K	R929	ERDS2TJ223T	1/4W 22K △
R47, 48	ERDS2TJ102T	1/4W 1K	R605	ERDS2TJ103T	1/4W 10K	R930	ERDS2TJ821T	1/4W 820
R49, 50	ERDS2TJ223T	1/4W 22K	R606	ERDS2TJ472T	1/4W 4. 7K △	R931	ERDS2TJ223T	1/4W 22K
R51, 52	ERDS2TJ332T	1/4W 3. 3K	R607, 608	ERDS1FVJ100T	1/2W 10 (E, EG)△	R932	ERDS2TJ821T	1/4W 820
R53, 54	ERDS2TJ561T	1/4W 560	R607, 608	ERD2FCVG100T	1/4W 10 (EB)△	R933, 934	ERDS1FVJ120T	1/2W 12 △
R55, 56	ERDS2TJ223T	1/4W 22K	R609, 610	ERDS2TJ102T	1/4W 1K	R935	ERDS2TJ222T	1/4W 2. 2K
R57, 58	ERDS2TJ472T	1/4W 4. 7K	R611, 612	ERDS2TJ101T	1/4W 100	R936	ERDS2TJ103T	1/4W 10K
R301	ERDS2TJ102T	1/4W 1. 0	R613, 614	ERDS1FVJ270T	1/2W 27 (E, EG)△	R937	ERDS2TJ222T	1/4W 2. 2K (EB)
R302, 303	ERDS2TJ183T	1/4W 18K	R613, 614	ERD2FCVG270T	1/4W 27 (EB)△	R938	ERDS2TJ332T	1/4W 3. 3K (EB)
R304, 305	ERDS2TJ100T	1/4W 10	R615, 616	ERDS2TJ222T	1/4W 2. 2K	R939	ERDS2TJ103T	1/4W 10K
R306	ERDS2TJ222T	1/4W 2. 2K	R617, 618	ERDS1FVJ100T	1/2W 10 (E, EG)△	R941	ERDS2TJ152T	1/4W 1. 5K
R307	ERDS2TJ123T	1/4W 12K	R617, 618	ERD2FCVG100T	1/4W 10 (EB)△	R942, 943	ERDS2TJ103T	1/4W 10K
R308	ERDS2TJ102T	1/4W 1K	R619, 620	ERDS2TJ391T	1/4W 390 △	R944	ERDS2TJ471T	1/4W 470
R309	ERDS2TJ561T	1/4W 560	R621, 622	ERDS2TJ101T	1/4W 100	R946, 947	ERDS2TJ103T	1/4W 10K
R310	ERDS2TJ222T	1/4W 2. 2K	R627	ERDS1FVJ180T	1/2W 18 △	R953	ERDS2TJ152T	1/4W 1. 5K (EB)
R311, 312	ERDS2TJ100T	1/4W 10	R701	ERDS2TJ821T	1/4W 820	R953	ERDS2TJ821T	1/4W 820 (E, EG)
R313, 314	ERDS2TJ154T	1/4W 150K	R702	ERDS2TJ102T	1/4W 1K	R954	ERDS2TJ472T	1/4W 4. 7K
R315, 316	ERDS2TJ153T	1/4W 15K	R703	ERDS2TJ122T	1/4W 1. 2K	R955, 956	ERDS2TJ223T	1/4W 22K
R317	ERDS2TJ822T	1/4W 8. 2K	R704	ERDS2TJ152T	1/4W 1. 5K	R957	ERDS2TJ273T	1/4W 27K
R318	ERDS2TJ222T	1/4W 2. 7K	R705	ERDS2TJ182T	1/4W 1. 8K	R958	ERDS2TJ822T	1/4W 8. 2K
R319	ERDS2TJ102T	1/4W 1K	R706	ERDS2TJ222T	1/4W 2. 2K	R959	ERDS2TJ103T	1/4W 10K
R320	ERDS2TJ332T	1/4W 3. 3K	R707	ERDS2TJ332T	1/4W 3. 3K	R961	ERDS2TJ122T	1/4W 1. 2K
R321	ERDS2TJ103T	1/4W 10K	R708	ERDS2TJ472T	1/4W 4. 7K	R962	ERDS2TJ472T	1/4W 4. 7K
R322	ERDS2TJ563T	1/4W 56K	R709	ERDS2TJ682T	1/4W 6. 8K	R963	ERDS2TJ392T	1/4W 3. 9K
R323	ERDS2TJ822T	1/4W 8. 2K	R710	ERDS2TJ123T	1/4W 12K	R964	ERDS2TJ223T	1/4W 22K
			R711	ERDS2TJ223T	1/4W 22K	R965, 966	ERDS2TJ101T	1/4W 100

Ref. No.	Part No.	Values & Remarks	Ref. No.	Part No.	Values & Remarks
R967	ERDS2TJ104T	1/4W 100K	C325, 326	ECKR1H122KB5	50V 1200P
R968	ERDS2TJ223T	1/4W 22K △	C327	ECEA1EK100B	25V 10U
R971	ERDS2TJ472T	1/4W 4. 7K	C328	ECBT1H180J5	50V 18P
R971A	ERDS2TJ271T	1/4W 270	C401, 402	ECKR1H122KB5	50V 1200P
R972A	ERDS2TJ183T	1/4W 18K	C403, 404	ECKR1H152KB5	50V 1500P
R973	ERDS2TJ1R0T	1/4W 1. 0 △	C405-408	ECQB1H222JZ3	50V 2200P
R974	ERDS2TJ471T	1/4W 470 △	C409, 410	ECEA1HJR56B	50V 0.56U
R975	ERDS2TJ101T	1/4W 100	C411, 412	ECEA1HJR33B	50V 0.33U
R977	ERDS2TJ472T	1/4W 4. 7K △	C413, 414	ECKR1H122KB5	50V 1200P
R978	ERDS2TJ331T	1/4W 330 (EB)	C415, 416	ECEA1EK4R7B	25V 4. 7U
R979	ERDS2TJ432T	1/4W 4. 3K	C551, 552	ECQV1H104JZ3	50V 0.1U
R980	ERDS2TJ472T	1/4W 4. 7K	C553, 554	ECEAOJU470B	6. 3V 47U
R981	ERDS2TJ821T	1/4W 820 (EB)	C601	ECKR2H682PE	500V 6800P △
R982	ERDS2TJ182T	1/4W 1.			

Cassette Deck

RS-B465

DEUTSCH

MESSUNGEN UND EINSTELL METHODEN

Meßinstrumente

- Elektronisches Voltmeter (EVM)
- Oszilloskop
- Digitaler Frequenzmesser
- Audiofrequenz-Oszillator
- Dämpfungswiderstand
- Gleichstrom-Voltmeter
- Widerstand (600Ω)

Tonkopf-Azimuteinstellung

1. Spielen Sie auf dem Testband (QZZCFM) den Teil für die Azimuteinstellung (8kHz, -20dB) ab. Drehen Sie die Azimuteinstellschraube so lange, bis die Abgaben des L-K und R-K den Höchstwert erreichen, und die Lissajousfigur sich, wie abgebildet, 0 Grad nähert.

Anmerkung:

Wenn L-K und R-K nicht auf demselben Punkt ihren Höchstwert erreichen, stellen Sie beide Kanäle auf den jeweiligen Höchstwert und gleichen dann aus.

2. Nehmen Sie denselben Einstellvorgang in der Wiedergabestellung vor.
3. Nach der Einstellung Schrauben-Sicherungsmittel an die Azimuth-Einstellschraube geben.

Einstellung der Gesamtverstärkungsregelung

1. Legen Sie das normale Leertestband (QZZCRA) ein und stellen das Gerät auf Aufnahme-/Betrieb.
2. Legen Sie ein Bezugseingabesignal (1kHz, -24dB) an. Stellen Sie das Ausgangssignal auf einen Pegel von 0V ein.
3. Nehmen Sie das Eingabesignal auf.
4. Geben Sie das in Schritt 3 oben aufgenommene Signal wieder und achten Sie darauf, daß das Ausgangssignal mit dem Normwert übereinstimmt.
5. Sollte der Wert nicht innerhalb der Norm liegen, justieren Sie VR3 (L-K) und VR4 (R-K).
6. Wiederholen Sie die Schritte 2~5 von oben so lange, bis das Ausgangssignal im Normbereich liegt.

Bandgeschwindigkeitseinstellung

1. Spielen Sie den Mittelteil des Testbands (QZZCWAT) ab.
2. Stellen Sie den VR901 so ein, daß die Abgabe den Normwert erfüllt.

Gesamt frequenzgang

1. Legen Sie das normale Leertestband (QZZCRA) ein und stellen das Gerät auf Aufnahme-/Pause-Betrieb.
2. Geben Sie über einen Lautstärkeregler ein Bezugseingabesignal (1kHz, -24dB) ein.
3. Stellen Sie das Signal auf 20dB und justieren die Frequenz von 50Hz~10.0kHz.
4. Nehmen Sie das Wobbel signal auf.
5. Geben Sie das aufgenommene Signal wieder und achten darauf, daß dieses sich im Vergleich zur Bezugsfrequenz (1kHz) in dem in Abb. 8 aufgezeichneten Bereich befindet.
6. Sollte das Signal nicht im Normbereich liegen, justieren Sie VR301 (L-K) und VR302 (R-K) so, daß der Frequenzpegel mit der Norm übereinstimmt.
7. Wiederholen Sie die Schritte 2~6 und verwenden das CrO₂ Band (QZZCRX) und das Metallband (QZZCRZ). Der Frequenzbereich wird auf 12.5kHz (50Hz~12.5kHz) angehoben.
8. Achten Sie darauf, daß sich der Frequenzpegel in dem in Abb. 9 aufgezeigten Bereich befindet.

Einstellung der Wiedergabeverstärkungsregelung

1. Spielen Sie auf dem Testband (QZZCFM) den Teil für die Einstellung der Verstärkungsregelung (315Hz, 0dB) ab.
2. Stellen Sie VR1 (L-K) und VR2 (R-K) so ein, daß die Abgabe den Normwert erfüllt.

Wiedergabefrequenzaang

1. Spielen Sie auf dem Testband (QZZCFM) den Teil für den Frequenzgang (315Hz, 12.5kHz~63Hz, -20dB) ab.
2. Achten Sie darauf, daß der Frequenzgang für beide Kanäle (L-K, R-K) in dem in Abb. 6 gezeigten Bereich liegt.

FRANÇAIS

METHODES DES MEASURES ET REGLAGES

Appareils de mesurage

- Voltmètre électronique
- Oscilloscope
- Compteur de fréquence numérique
- Oscillateur de fréquence audio
- A.T.T. (Atténuateur)
- Voltmètre à C.C.
- Résistance (600Ω)

Réglage Azimutal de la tête

1. Faire jouer la portion du réglage de l'azimuth (8kHz, -20dB) de la bande d'essai (QZZCFM). Ajuster la vis de la mise au point azimutale jusqu'à ce que les sorties du canal de gauche et du canal de droite soient maximisées et que la forme d'onde de Lissajous, comme il est illustré, approche de 0 degré.

Nota:

Si le canal de gauche et canal de droite ne sont pas maximisés au même point, régler le point où les niveaux de chaque canal sont maximisés et égaux.

2. Effectuer le même réglage sur le mode d'audition.
3. Après cela, mettre une goutte de vernis de blocage sur la vis de réglage de l'azimut.

Réglage de L'amplification Totale

1. Introduire la bande d'essai vierge normale (QZZCRA) et régler l'appareil sur le mode d'intermission d'un disque.
2. Appliquer un signal d'entrée de référence (1kHz, -24dB). Diminuer la sortie de telle sorte que son niveau devienne de 0V.
3. Enregistrer ce signal d'entrée.
4. Faire jouer le signal enregistré à l'étape 3 ci-dessus, et s'assurer que la sortie est en deçà de la valeur standard.
5. Si elle n'est pas en deçà de la valeur standard, régler VR3 (canal de gauche) et VR4 (canal de droite).
6. Répéter les étapes 2~5 ci-dessus jusqu'à ce que la sortie soit en deçà de la valeur standard.

Réglage de la Vitesse de Défilement

1. Faire jouer la portion médiane de la bande d'essai (QZZCWAT).
2. Régler VR901 de telle sorte que la sortie soit en deçà de la valeur standard.

Réponse en Fréquence Totale

1. Introduire la bande d'essai vierge normale (QZZCRA) et régler l'appareil sur le mode d'intermission d'un disque.
2. Appliquer un signal d'entrée de référence (1kHz, -24dB) par l'intermédiaire d'un atténuateur.
3. Diminuer le signal de 20dB et régler la fréquence de 50Hz~10.0kHz.
4. Enregistrer le balayage de fréquence.
5. Faire jouer le signal enregistré et s'assurer qu'il soit en deçà de la plage montrée à la Fig. 8 en comparaison à la fréquence de référence (1kHz).
6. Si elle n'est pas en deçà de la plage standard, régler VR301 (canal de gauche) et VR302 (canal de droite) de telle sorte que le niveau de fréquence soit en deçà de la plage standard.
7. Répéter les étapes 2~6 ci-dessus en utilisant la bande CrO₂ (QZZCRX) et la bande métallisée (QZZCRX) en augmentant la plage de fréquence à 12.5kHz (50Hz~12.5kHz).
8. S'assurer que le niveau soit en deçà de la plage montrée à la Fig. 9.

Réglage de L'amplification de Lecture

1. Faire jouer la partie réglée de l'amplification (315Hz, 0dB) de la bande d'essai (QZZCFM).
2. Régler VR1 (canal de gauche) et VR2 (canal de droite) de telle sorte que la sortie soit en deçà de la valeur standard.

Réponse en Fréquence de la Lecture

1. Faire jouer la partie de la réponse en fréquence (315Hz, 12.5kHz, -63Hz, -20dB) de la bande d'essai (QZZCFM).
2. S'assurer que la réponse en fréquence soit en deçà de la plage montrée dans la Fig. 6, à la fois pour le canal de gauche et le canal de droite.

ESPAÑOL

METODOS DE AJUSTE Y MEDIDA

Instrumento de medición

- EVM (Voltímetro electrónico)
- Osciloscopio
- Frecuencímetro digital
- Oscilador AF
- ATT (Atenuador)
- Voltímetro CC
- Resistor (600Ω)

Ajuste Azimutal de Cabeza

1. Reproducir la porción de ajuste azimutal (8kHz, -20dB) de la cinta de prueba (QZZCFM). Variar el tornillo de ajuste azimutal hasta que las salidas del CH-I y CH-D se maximicen y la forma de onda de lissajous, como ilustrado, se acerque a grado 0.

Nota:

Si CH-I y CH-D no son maximizados en el mismo punto, ajustar al punto donde los niveles de cada canal sean maximizados e igualados.

2. Efectuar el mismo ajuste en la modalidad de reproducción.
3. Dcspués del ajuste, aplique pintura de fijación al tornillo de ajuste del azimut.

Ajuste de Ganancia Total

1. Insertar la cinta de prueba en blanco normal (QZZCRA) y poner la unidad en modalidad de pausa de Grabación.
2. Aplicar la señal de entrada de referencia (1kHz, -24dB). Atenuar la salida de manera que su nivel se haga 0V.
3. Grabar la señal de entrada.
4. Reproducir la señal grabada en el paso 3 de arriba y asegurarse de que la salida esté dentro del valor estándar.
5. Si no está dentro del valor estándar, ajustar VR3 (CH-I) y VR4 (CH-D).
6. Repetir el paso 2~5 de arriba hasta que la salida esté dentro del valor estándar.

Ajuste de Velocidad de Cinta

1. Reproducir la porción de la cinta prueba (QZZCWAT).
2. Ajustar VR901 de manera que salida esté dentro del valor estándar.

Respuesta de Frecuencia Total

1. Poner una cinta virgen normal (QZZCRA) y poner la unidad en la modalidad de Pausa de Grabación.
2. Aplicar la señal de entrada de referencia (1kHz, -24dB) a través de un atenuador.
3. Atenuar la señal por 20dB y ajustar la frecuencia de 50Hz~10.0kHz.
4. Grabar el barrido de frecuencia.
5. Reproducir la señal grabada y asegurarse de que esté dentro de la gama mostrada en la Fig. 8 en comparación con la frecuencia de referencia (1kHz).
6. Si no està dentro de la gama de frecuencia, ajustar VR301 (CH-I) y VR302 (CH-D) de manera que el nivel de frecuencia esté dentro de la gama estándar.
7. Repetir los pasos 2~6 de arriba utilizando la cinta CrO₂ (QZZCRX) y la cinta metálica (QZZCRZ) incrementando la gama de frecuencia a 12.5kHz (50Hz~12.5kHz).
8. Asegurarse de que el nivel est&e 19 mdentro de la gama mostrada en la Fig. 9.

Ajuste de Ganancia de Reproducción

1. Reproducir la porción ajustada de ganancia (315Hz, 0dB) de la cinta de prueba (QZZCFM).
2. Ajustar VR1 (CH-I) y VR2 (CH-D) de manera que la salida esté dentro del valor estándar.

Respuesta de Frecuencia de Reproducción

1. Reproducir la parte de respuesta de frecuencia de reproducción (315Hz, 12.5kHz~63Hz, -20dB) de la cinta de prueba (QZZCFM).
2. Asegurarse de que la respuesta de frecuencia esté dentro de la gama mostrada en la Fig. 6 para ambos CH-I y CH-D.